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ABSTRACT

A detailed grammar of Buem, one of the Togo-Remnant Languages spoken in Ghana's Volta region, describes the major structures and many minor structures occurring in informal and semi-formal speech. The phonetics and much of the phonology are described in taxonomic terms, and the vowel harmony system, syntax, and morphology are described in a slightly modified model of transformational-generative grammar. The discussions of vowel harmony, the noun class system, the verbal aspect system, and serial verb constructions are of special interest to the non-specialist. (MSE)

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A GRAMMAR OF BUɛM:
THE LɛLɛMI LANGUAGE

Edward Jay Allan

Thesis presented for the degree
of
Doctor of Philosophy
in the
School of Oriental and African
Studies,
University of London

August, 1973

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Abstract

This grammar of the Lɛlɛmi dialect of Buɛm is the first attempt to describe the morphology and syntax of any of the 14 Togo-Remnant languages in detail; in it, I have tried to describe the major structures and many of the minor structures of the languageswhich occur in informal or semi-formal speech. The phonetics and most of the phonology are described in taxonomic terms; the vowel harmony system and the syntax and morphology, however, are described in a slightly modified "_Aspects_" model of transformational-generative grammar. Of special interest to the non-specialist are my discussions of vowel harmony, of the noun class system, and of the verbal aspect system and serial verb constructions.

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So many people helped me in Ghana that I don't really know where to begin, though first place in my thanks must

undoubtedly go to George Mamson Agyei, my steward, one of my principal informants, and most importantly my friend, for all he did to make my stay in Ghana both successful and enjoyable. Immediately after George, I must mention Nana Agyei, Chief of Okajakrom and Twifohene of Buɛm, whom I had good reason to call àti 'Father', and my informants, not only for Buɛm, but for other languages too; unfortunately, they were too numerous to thank individually by name, but my appreciation goes out to them as individuals. My thanks also go out to Mr. W.K. Agbenyega, Principal of Jasikan Training College, Mr. P.K. Akoto-Ampaw, Principal of St. Francis' Training College, and Ms. Janet E. Booth, Officer-in-Charge of the Hohoe Teachers Center, for their kindness in letting me teach at their respective institutions and to my friends--former colleagues and former students--for making work so fun.

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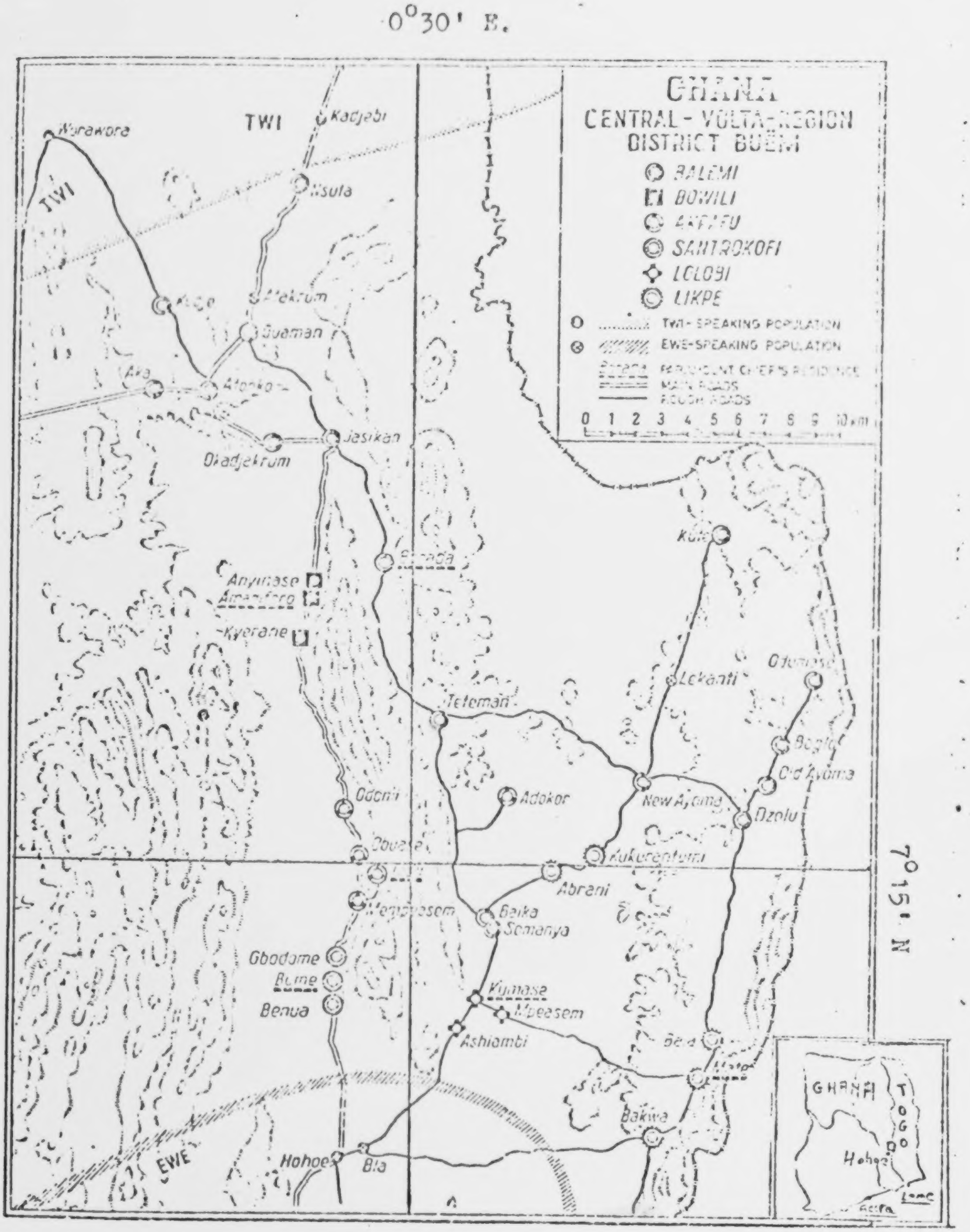
Part I. Introduction



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The People

The area around the hills which mark the border betwen Ghana and Togo is--or should be--of interest to the comparative Africanist for it is inhabited by a number of different peoples, called collectively the Togo Remnant peoples, who speak languages which seem quite different from the languages spoken by their neighbors. In this grammar, I shall attempt to describe the language spoken by the Buɛm, who are, with a population of about 17,000, the second most numerous of all the Togo Remnant peoples and by far the most numerous of any of the ten Togo Remnant peoples now living in present-day Ghana.

The Buɛm live in seventeen villages and towns in the middle of Ghana's Volta Region (see map); these villages and towns are located between the Togo border to the East and Tapa Abotiase and Worawora (both excluded) to the West and between Hohoe to the South and Kadjebi to the North (both excluded). There are no Buɛm settlements in Togo itself. While the biggest town in the Buɛm speaking area is Jasikan, much of Jasikan's population consists of migratory cocoa farmers from Togo and other parts of Ghana, so that the Buɛm town with the greatest number of Buɛm speakers in it is probably Borada, where the Paramount Chief lives.

Linguistically and ethnically, the Buɛm are bordered by the Akans to the North and West, by the Bowiri, the Akpafu-Lɔlɔbi and the Likpe to the South, and by the Axlo and Kposo to the East. Just beyond the Akpafu-Lolobi, the Likpe, the Axlo and the Kposo are the Ewes. Both Akan and Ewe belong to the Volta-Comoe sub-group of Kwa; all the other languages are Togo Remnant languages. Most Buɛm, including the women, speak Buɛm plus another language: the western segment of the Buɛm, the Bàfana, speak Buɛm and Akan, while the eastern segment, the Bàlɛ̀mi, speak Buɛm and Ewe; almost all the younger Buɛm also speak at least some English as well, and some of the oldermen still understand German.

The Language

Genetic Relationships. According to Heine (1968), Buɛm is most closely related to Akpafu-Lolobi and then to Likpe and Santrokofi; Heine places all four languages within the "NA" sub-division of the Togo Remnant languages (henceforth, TRLs). The relationships, however, of the TRLs with other language groups still remains quite indeterminate: Greenberg (1963) feels that the TRLs are a sub-group of Akan-Ewe in the Kwa sub-family of Niger-Congo; Heine agrees with this, adding that he feels the TRLs are most closely related to Guang, but that Guang is closer to Akan than it is to the TRLs. On the other hand, de Wolf (1971) feels that "Togo Remnant is definitely part of Benue-Congo and that all other languages of Greenberg's (1966) Kwa subfamily DO form part of a higher unit of which Benue-Congo is the other part" (de Wolf's emphasis) and continues by placing the TRLs tentatively on a level co-ordinate with Plateau and Jukunoid under Benue-Congo. At present, however, only the Scottish verdict of "Not Proven" can be given to any of these claims.

Dialects of Buɛm. Buɛm speakers are divided into two groups: the Bàfana (literally, "those who remained"), who live to the north and west of Baika and who call what they speak Lɛ̀fana, and the Bàlɛ̀mi (literally, "those who advanced"), who live to the east of Teteman and who call what they speak Lɛ̀lɛ̀mi. In addition, Lɛ̀fana has three readily distinguishable sub-dialects: "General" Lɛ̀fana, the Lɛ̀fana spoken in Baika, and the Lɛ̀fana spoken in Borada. Lɛ̀lɛ̀mi is substantially uniform and is mutually intelligible with all forms of Lɛ̀fana. In this grammar, I shall use the name "Buɛm" to refer to the language spoken by the Bàfana and the Bàlɛ̀mi, reserving the names "Lɛ̀fana" and "Lɛ̀lɛ̀mi" strictly for matters dealing with one dialect but not the other; the name "Buɛm", incidentally, is of Twi origin and is the name used by non-Buɛms to refer to the Buɛm and by Buɛms themselves to refer to themselves to non-Buɛms.

While a full-scale dialect study is impossible here, the following notes should indicate some of the more significant differences between Lɛ̀lɛ̀mi and Lɛ̀fana:

1. Vocabulary. Lɛ̀fana has, in general, borrowed many more words from Akan than has Lɛ̀lɛ̀mi. In addition, Lɛ̀fana speakers from Baika seem to have innovated rather more words from other sources than have speakers of any of the other dialects, presumably because Baika speakers form a sort of enclave among speakers of Likpe and Lolobi.

2. Phonology. (a) In Lɛ̀lɛ̀mi, /l/ may occur in any consonantal position and is almost always realized as [l]. In Lɛ̀fana, however, /l/ occurs as [l] only morpheme initially; elsewhere, /l/ has the following realizations:

i. In Borada, /l/ never occurs word-initially:

Lɛ̀l.	lìlù	-	Borada	ìlù	'yam'
Lɛ̀l.	lisɛmi	-	Borada	ìsɛmi	'Teteman'
Lɛ̀l.	lɛ́dì	-	Borada	ɛ́dì	'I ate'

ii. In Lɛ̀lɛ̀mi, /l/ is almost always realized as [l] when it follows a consonant; in Lɛ̀fana, however, /l/ is always realized as [r] after a consonant:

Lɛ̀l.	bɔbla	~	Lɛ̀f.	bɔbra	'to do'
Lɛ̀l.	ɔ̀klɔɔ̀	~	Lɛ̀f.	ɔ̀krɔɔ̀	'canoe'
Lɛ̀l.	ɔ̀klàma	~	Lɛ̀f.	ɔ̀kràma	'dog'
Lɛ̀l.	àvlatɛ	~	Lɛ̀f.	àvratɛ	'thirty'

iii. In Lɛ̀lɛ̀mi, the first person singular agreement prefix for past tenses of the verb is lɛ́- or lí- , depending on vowel harmony; in most Lɛ̀fana dialects, however, it is nɛ́- or ní- and in the Borada subdialect, as just noted, it is ɛ́- or í- :

Lɛ̀l.	lɛ́dì	~	Lɛ̀f.	nɛ́dì	'I ate'
Lɛ̀l.	lɛ́fɔ̀	~	Lɛ̀f.	nɛ́fɔ̀	'I washed'
Lɛ̀l.	líbò	~	Lɛ̀f.	níbò	'I came'
Lɛ̀l.	líyè	~	Lɛ̀f.	níyè	'I bought'
Lɛ̀l.	límwì	~	Lɛ̀f.	nímwì	'I praised'

(b) Lɛ̀lɛ̀mi verbs with the structure $-CV_1lV_2$ have reflexes in Lɛ̀fana in which there is syncope of the first vowel, yielding $-CrV_2$:

Lɛ̀l.	butulò	~	Lɛ̀f.	butrò	'to surpass

Lɛ̀l. bɔkulɔ̀ ~ Lɛ̀f. bɔkrɔ̀ 'to cut' .

This syncope, associated with the lengthening of the final vowel of the word, also occurs with some nouns as well:

Lɛ̀l. adilà - Lɛ̀f. adraà 'food'
Lɛ̀l. lɛtalà ~ Lɛ̀f. lɛtraà 'mat'
Lɛ̀l. lɛvalà - Lɛ̀f. lɛvraà 'egg'

(c) In Lɛ̀fana, underlying nasalized vowels are realized as nasalized vowels on the surface as well; however, in at least the Baglo sub-dialect of Lɛ̀lɛ̀mi, underlying nasalized vowels are realized only as oral vowels unless they occur before a stop consonant within the same noun phrase, in which case the underlying nasalized vowels are realized as $\tilde{V} + N$:

Lɛ̀l. [atu] - Lɛ̀f. [atũ] 'elephant'
Lɛ̀l. [ɔtɔ] - Lɛ̀f. [ɔtɔ̃] 'house'
Lɛ̀l. [bɔku] ~ Lɛ̀f. [bɔkũ] 'to chew'

1a. Lɛ̀l. líyɛ̀ ɔtɔ.
b. Lɛ̀f. líyɛ̀ ɔtɔ̃.
1s+Pa+buy house.
'I bought a house.'

but, in both Lɛ̀lɛ̀mi and Lɛ̀fana,

2. lísè̖ ɔ̀tɔ ŋ kɛmo.
1s+Pa+go house ∅ inside.
'I went inside the house.'

(d) In Lɛ̀fana and in some sub-dialects of Lɛ̀lɛ̀mi, the sequence /t/ + /i/ is realized as [tʃi] ; this palatalization does not occur in the Baglo sub-dialect of Lɛ̀lɛ̀mi:

Bag.	[àti]	~	Tet.	[àtʃi]	'father'
			Ok.	[àtʃi]	
Bag.	[lítì]	~	Tet.	[lítʃì]	'I took'
			Ok.	[nítʃì]	
Bag.	[mɔ̀ɔtimì]	~	Ok.	[mɔ̀ɔtʃimì]	'I'm reducing (e.g., price
Bag.	[ɔ̀ɔ̀tià]	~	Ok.	[ɔ̀ɔ̀tʃià]	'he learns'
Bag.	[ɔ̀ɔ̀tinà]	~	Ok	[ɔ̀ɔ̀tʃinà]	'he teaches'

There is one exception to this, however; in all dialects, the segment /t/ of the verb bɔ̀tì 'to know' is realized as [dʒ] in the present tense affirmative, though in paradigms for all other tenses the segment /t/ is realized either as [t] or as [tʃ], depending on dialect. In Baglo, for example, we get the following alternations:

[ǹdʒì]	'I know'	[nàatì]	'I don't know'
[àdʒì]	'You(s) know'	[àatì]	'You(s) don't know'
[ɔ̀dʒì]	'He knows'	[ɔ̀ɔtì]	'He doesn't know'
[bɔ̀dʒì]	'We know'	[bɔ̀ɔtì]	'We don't know'

etc.

(e) Some nouns which show reduplication of the stem consonant in Lɛ̀lɛ̀mi have reflexes in Lɛ̀fana in which the first syllable of the stem is deleted with a concomitant lengthening of the vowel of the prefix:

Lɛ̀l.	ɔ̀nànà	~	Lɛ̀f.	ɔ̀ɔ̀nà	'man'
Lɛ̀l.	kajijɛ	~	Lɛ̀f.	kaajɛ	'monkey'
Lɛ̀l.	àŋwɛŋwɛ̀	~	Lɛ̀f.	aaŋwi	'bee'.

but

Lɛ̀l.	alɛlɛ	~	Lɛ̀f.	alɛlɛ	'fly'

3. Syntax. (a) In Lɛ̀lɛ̀mi, both low tone and mid tone verbs are homophonous in the affirmative simple past tense; in Lɛ̀fana, mid tone and low tone verbs are differentiated in the affirmative simple past:

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Lɛl.	lɛ́ŋwà	'I cooked; I harvested'
Lɛ̀f.	nɛ́ŋwà	'I cooked'
	nɛŋwà	'I harvested'

(b) Even in informal or casual speech, Lɛlɛmi speakers generally retain the full range of concord and agreement in pronouns and in verb prefixes; many Lɛ̀fana speakers, on the other hand, use the unmarked pronoun forms in informal speech and appear to alternate randomly between marked and unmarked agreement in verb prefixes in casual speech.

Earlier work on the language. Heine (1968) presents the most comprehensive over-view of the field of Togo Remnant studies; however, since Heine's aims were the comparative study of the respective noun class systems coupled with the historical reconstruction of the lexicon, his treatment of individual languages is necessarily brief. To date, the only lengthy studies of any of the TRLs are Ford (1971), a study of aspects, primarily tonal, of Avatime, and Höftmann (1971), an outline grammar of Lɛlɛmi with some connected texts;

unfortunately, I did not learn of Höftmann's grammar until this thesis was virtually completed. Otherwise, there have been only about 15 works dealing with Buɛm as Buɛm; for the most part, these works are wɔrdlists, of which Kropp (1967) is by far the most extensive and the most useful for general purposes, while Cansdale (undated) is a valuable comparative guide to animal names throughout Ghana. The first known work on the syntax of Buɛm is Westermann (1910), which gives a brief outline, generally accurate, of sɔme of the major structures of the language and which has a Lɛ̀fana-German lexicon as well; other syntactic wɔrk consists of Höftmann (1966), Höftmann (1970), Allan (1972a) and Allan (in press). Seidel (1898), working from Plehn (1895), represents the first attempted description of the phonology of Buɛm; possibly owing to shortcomings in the source material (which I have not seen), Seidel's work is wildly inaccurate, and the findings in Westermann (1910) are much more in line with my own, especially with tespect to the vowel system (Allan, 1972b; see also Ford (in press)).

Work in the language. Funke (1919) presents the first connected text, a discussion of marriage customs which internal evidence suggests came from a speaker from Teteman. The Rev. Fr. A.O. Dogli, from Baglo, wrote everything else printed in Buɛm: ten pamphlets, largely religious and pedagogical in nature, which appeared at irregular intervals between 1953 and 1955; in addition, Fr. Dogli translated the entire Catholic missal, which is still in use. At the present time, the Rev.FFr. J. Laast is preparing a Lɛlɛmi hymn book at Teteman. Both Fr. Dogli and, I believe, Fr. Laast transcribe Buɛm using Ewe orthography; letters my Lɛfana speaking friends have written me generally use Twi orthography. As far as I know, there are no plans to translate the Bible into Buɛm.

In addition to these texts, and those in Höftmann and Ayitevi (1968), there are two phonograph records (i.e., four sides) of evangelical preaching by a Mr. Odumah, from, I believe, Teteman.

The Grammar

Source dialect. This grammar is based on that dialect of Lɛlɛ̀mi spoken in Baglo and in Baglo-Odumase, $1\frac{1}{2}$ miles from Baglo. I chose this dialect primarily because it is probably the most conservative and because the only Buɛm literature, other than Funke's text, is written in this dialect. In addition, Lɛlɛ̀mi forms in general can be used as a sort of "base" from which certain Lɛ̀fana forms can be predicted given the addition of a small number of low-level phonological rules, like the /l-r/ alternation and metasthesis/syncope rules discussed in Dialects of Buɛm, above. Since the converse, that Lɛlɛ̀mi forms can be predicted from the Lɛ̀fana forms, is not true in the self-same cases, a grammar of Lɛlɛ̀mi can be considered as being, in a significant way, a "source grammar" for Lɛ̀fana.

Fieldwork. I collected material for this grammar during a 23-month field trip from September 1970 to July 1972; the first year of this time I spent at Jasikan Training

College, Jasikan (Buɛm) and the balance of my stay at St. Francis' Training College, Hohoe. My principal informants for Lɛ̀fana were Messrs. Kojo Ginger Ray Braimah-Mintah, a student at Jasikan Training College, and George Lamson Agyei, a student at Volta Commercial College, both natives of Okajakrom, and my principal informants for Lɛ̀lɛ̀mi were Messrs. Lewis D.K. Dokpor, a student at Jasikan Training College who came from Baglo, and Dominic K. Nyarko, a student at St. Francis' Training College who came from Baglo-Odumase. Both of my principal Lɛ̀lɛ̀mi informants had had previous experience with working with their language: Dokpor stayed with his classificatory grandfather, the Rev. Fr. Dogli, who tried to pass on to him a feel for the structure of his language, and Nyarko had previously served as an informant for Hildegard Hoeftmann during her field trip to Baglo. Mr. Philip Agyakwa, from Atonkor, and Mr. Lucas Aggadey, from Baglo, also contributed substantial amounts of time, and Messrs. Michael Dudu and Richard Akoto-Addey gave me much useful information on the Borada dialect of Lɛ̀fana.

Costs of the fieldwork were met by the Central Research Fund of the University of London, which provided me with a generous grant for equipment and informant's fees.

Scope and format of the grammar. In this grammar I will deal with the synchronic description of the phonology, morphology, and syntax of Lɛ̀lɛ̀mi: because the only published descriptions of any of the Togo Remnant languages consist primarily of sketchy fragments, dealing mostly with the noun class systems and rarely with anything else, it seems to me preferable to attempt a description of the complete language (with the exception of its semantics), even at the risk of appearing to deal with some portions of that description superficially, rather than to deal with a smaller portion of the language exhaustively.

The phonology consists of the taxonomic description of the sounds that I have heard used in speech and of the permissable combinations of those sounds; I have, in addition, tried to give a generative phono-

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logical account of the vowel harmony system. The morphology and syntax are described within the framework of the "Aspects model" (alias "Standard Theory") of transformational generative grammar as proposed in Chomsky (1965) and modified in Chomsky (1970). Basically, this theory entails the use of a relatively small number of ordered context-free rules, called "base rules," which establish the "deep structure," or the basic relationship and order of the elements of a sentence, followed by a series of context-sensitive rules, not necessarily ordered, called "transformational rules," which can alter the relationships and ordering established by the base rules and which can combine elements to form the "surface structure." Generally speaking, in this grammar I will use base rules to develop what has traditionally been called "syntax" and transformational rules to develop what has traditionally been called "morphology." I have generally omitted base rules which rewrite non-terminal symbols into individual words, in order to avoid useless pedantry. At this point, I should mention that I intend to use the theory of transformational grammar as a tool to help to describe the language, not to use the language as a tool to help describe the theory of transformational grammar; in short, I don't want to hide the forest for the "trees." Since I am not a native speaker of Lɛlɛmi, I cannot claim that my rules will generate "all and only" grammatical sentences in Lɛlɛmi; my rules will, however, generate all the structures commonly used within a single sentence of discourse and should generate many of the rarer structures as well.

Except where the study of semantics directly impinges on the syntax of Lɛlɛmi or where the semantics of Lɛlɛmi presented definite problems to me when I was learning the language, the field of semantics has been excluded from this grammar.

Part II. Phonology.

Transcription

In this grammar, I have used the "Africa" alphabet, rather than the International Phonetic Alphabet (IPA), to transcribe segmental speech sounds, i.e., consonants, vowels, and glides; this transcription differs from an IPA transcription with respect to the following: the use of the symbol 'y' to denote the palatal glide transcribed in IPA as 'j', and the use of the symbols 'j' and 'c' to denote the palatal affricates transcribed in IPA as 'dʒ' and 'tʃ', respectively. Suprasegmental speech sounds are transcribed as follows:

ṽ		Nasalization
v́		High tone
v	(unmarked)	Mid tone
v̀		Low tone
'v		Downstepped tone

Underlying representations subject to morphophonemic alternations are written with capital letters, e.g., the form BA- is the underlying representation of the surface prefixes [ba] or [be] (with the selection based on vowel harmony). In underlying representations, tone is marked as follows:

V́	Underlying High tone on that segment
V̍	Underlying Mid tone " " "
V̀	Underlying Low tone " " "
´V	Underlying High tone on preceding segment
ˈV	Underlying Mid tone " " "
\`V	Underlying Low tone " " "

When tone is not marked for an underlying segmental, V , this indicates that the tone on that segmental is subject to variation.

Because a strictly phonemic transcription could not adequately deal with problems of morphophonemic alternation, such as those presented by the vowel harmony system, I have used a broad phonetic transcription instead, which differs from a phonemic transcription in recognizing, for example, the /l-r/ alternations which a strictly phonemic transcription would ignore.

The Word

A "word" (as opposed to a "morpheme") in Buɛm can be defined in either of two ways:

i. A word is a sequence of sounds which can be uttered in isolation and which cannot be segmented into shorter sequences of sounds such that each such shorter sequence of sounds can also be uttered in isolation, or

ii. A word is a sequence of sounds which can function in syntagmatic relation with a word as defined above and which cannot be segmented into shorter sequences of sounds such that each such shorter sequence of sounds is itself a word, either as defined in (i.) above or in the first part of this definition.

Words defined under (i.) would be primarily nouns, verbs, cardinal numbers, adverbs, etc. which could occur either as commands or as answers to questions, for example, by themselves; words defined under (ii.) would be primarily noun modifiers, verb modifiers, prepositions, conjunctions, etc. which couldn't normally occur by themselves in isolation, but which can occur with words which can occur in isolation. While these definitions do have some loop-holes, they should be sufficiently rigorous for my needs.

The only monosyllabic words in Buɛm are:

i. Object Pronouns,
ii. The "Oral Comma," -ni , and some
iii. Connectives (Prepositions and Conjunctions),
iv. Adverbs,
v. Adjectives and Noun Quantifiers, and
vi. Onomatopoeic words.

All other words have at least two syllables; the longest word I have yet encountered has five syllables. The vast majority of all words have only two syllables, inclusive of prefix, followed by a much smaller number with three syllables, including prefix, and an even smaller number, almost all of them verbs, with four syllables, including prefix.

The Syllable

There are seven types of syllable which occur in native Buɛm words, listed below in descending order of estimated frequency:

i. CV ,
ii. V ,
iii. CwV ,
iv. Clv ,
v. N ,
vi. Vn , and
vii. CVn .

The CV type of syllable is far the commonest since it is the only type of syllable that can occur anywhere in a word and since, with certain minor exceptions, it is the only type of syllable that must occur in a word.

ku	'and, with'
dɛ̀	'how?'
bo	'Come!'
lɛ̀nà	'meat'
bèlɔ̀ku	'women'

bɔtinà	'to teach'
lìgulabi	'money'

Next commonest is the V type of syllable, which occurs either as an affix or as the residue of a presumed CV type syllable in a Noun Stem which has undergone metasthesis or some similar process.

ɔtɔ	'house'
úbɔ̀	'he came'
ɔ̀ɔŋwà	'he is harvesting'
ɔ̀dìa	'it is good'
ɔ̀siì	'gourd'
ɔ̀klantìɛ̀	'cutlass'

The only times that a V syllable occurs as the only syllable of a word are the Object Pronoun for the second person singular, ɔ , and onomatopoeic words and the answers to questions which are "Yes-Nò."

iii	'Yes'
77 ɔ́ɔɔ̀	'No'

Both CwV and ClV types of syllables have the same distribution, occurring only in stems, never as affixes. They are exemplified on pp. 51ff and occur as the only syllables of a word only in possessive pronouns (see pp. 166-8), in imperatives, in adjectives/noun quantifiers, and in onomatopoeic words.

ŋwa	'his, her, its'
bla	'Do!'
fwi	'Spit!'
bli	'small'
vla	'Bang!!'

Syllabic nasals occur only word initially or in compounds or derived forms.

ntu	'water'
ńsù	'but'
ǹda	'I am grasping'
katɛŋ̀kɔ̀	'bedroom'

Syllable type Vn occurs only in the word for 'corn', ɔ̀nta, ànta , and in the Baglo determiners ɔ̱́nvɔ̀ 'that' and ɔ̱́njɛ̀ 'yonder'; syllable type CVn occurs only in the word for 'corn', lɛ̀nta , in the Baglo determiners when they have CV- prefixes, e.g., bánvɔ̀ 'those', and in participles derived from Verb Stems with underlying nasalized vowels:

ɔ̱̀dundi	'killed'
ɔ̀kundi	'"chopped"'

The Consonants of Lɛlɛmi

		labial	alveolar	palatal	back	double
Stops	voiced	b	d		g	gb
	voiceless	p	t		k	kp
Fricatives	voiced	v				
	voiceless	f	s		h	
Affricates	voiced		j			
	voiceless		c			
Lateral			l r			
Nasals		m	n	ɲ	ŋ	
Glides		w		y		

Figure I

The Consonants

There are 21 consonants in Lɛ̀lɛ̀mi, 18 oral consonants and 3 nasal consonants; these consonants, plus /ŋ/, which is a conditioned allophone of /ɲ/ recognized in the orthography, are listed in Figure I. Except as noted below, these consonants have no allophonic variations.

/t/ is always realized in the Baglo dialect of Lɛ̀lɛ̀mi as [t] except in the affirmative present tense of the verb bɔ̄tì 'to know', where /t/ is realized as [j]:

àjì '2s knows' ~ àatì '2s doesn't know'.

In other dialects, there are other alternations as well, already discussed in Part I under Dialects of Buɛm.

/kp/ has three different realizations, of which the most common, [kp], has two full closures. Occasionally, however, some speakers use [pw] before /i/:

[úkpì] ~ [úpẁì] '3s died'.

Rarely, some speakers use a strongly aspirated [pʰ] before a back vowel:

[lìkpɔ̀] ~ [lìpʰɔ̀] 'place, knot'

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/b/ sometimes is realized as [ɓ], instead of [b], at the beginning of a sentence:

[bàasὲ] ~ [ɓàasὲ] 'birds'

/f/ has a variety of allophones, of which the commonest is a labio-dental realization in which the upper teeth come into contact with the back of the lip rather than the top and in which there is little or no rounding; this yields a sound intermediate between that usually transcribed as 'f' and that usually transcribed as either 'ɸ' or 'ƒ'. The realization [ƒ] is generally heard before /w/; occasionally, a form of /f/ with quite a noticeable "whistle" component also occurs before /w/, especially before /wi/:

[bàfwìɔ] ~ [bàƒwìɔ] ~ [bàƒ͡swìɔ] 'idol, fetish'.

In the word for 'leopard', usually pronounced [èbùoƒwara], the pharyngeal fricative [ɦ] is occasionally used:

[èbùoɦwa̧ra],

though one speaker does use the glottal fricative [h] here instead:

[èbùohwara].

Of the [ƒw] and [ƒ͡sw] sounds, Kropp (1967) writes:

"The sound transcribed ʃ$^{y}_{w}$ in Leʃana is a bilabial palatal voiceless spirant, in which the upper lip protrudes slightly over the lower (viz. Akan hw). Sometimes a slight whistle can be heard." There is noɔmention elsewhere in the literature of the "whistle" variant of /f/, although the whistle is often, as I say, quite noticeable: Heine (1968) simply lists both /f/ and /ʃ/ as phonemes, without further comment. It may be, therefore, that the whistle variant is quite a recent innovation.

/ɲ/ is written 'ny' in the texts. It has a velar allophone [ŋ], which occurs before /u/: àŋu 'he/she/it'

/l/ does not alternate with /n/ in the Baglo dialect, nor does it alternate with /r/ in the Baglo dialect except in the following words:

kadruì, kɔ	'compound'
kwabla ~ kwabra	'Thank you'
lijɛro	'I send greetings'
buvrɛ ~ buvlɛ	'Please'
bɔvruma	'to be different'
bɔtra	'to depart'

7 avrùkpɔ 'God'

/r/ occurs only in the above seven words, in the Baglo dialect, and in loan words:

lɔrì	'truck, lorry'
fraidè	'Friday'
ŋ̀kraà	'Accra'
raurà	'Worawora'
gɛgrɛgɛ	'a type of bush with milky stems'

Figure II

Consonantal Contrasts

	I/i	e/ɛ	a	o/ɔ	U/u
p	bɔ̀pì to be thick	bɔ̀pɛ̀ to cook	lɛ̀pa a bat		bùpù to spill over
b	bɔ̀bì to be cooked	bɔ̀bɛ̀ to hide	bɔ̀bà to be cold	bubo to come	bùbù to be wet
f	bùfì to roast	bɔfɛ to sneeze	ɔ̀fa an uncle	bɔ̀fɔ̀ to wash	bùfù to swell
v	bɔ̀vì to be across	buveì to fly	bɔ̀và to shout	buvɔ to borrow	lìvu ten

t	bùtì to take	bùtè to give	bɔ̀tà to rise	ɔtɔ a house	bɔtu to pierce
d	bɔ̀dì to eat	bude to be near	bɔ̀dà to grasp	kudo a side	bɔ̀dù to bite
c			bɔ̀cà to be at		bɔculà to burn s.t.
j	kàjìì a monkey	kajɛjɛ a basket	bɔja to drum	bɔ̀jɔ̀ to pluck	bɔju to be uprooted
s	bɔ̀sì to be from	buse to go	bɔ̀sà to be finished	bɔ̀sɔ̀ to continue	bɔ̀sù to speak
k	bɔ̀kìbi to repair	bɔkɛ to walk	bɔ̀kà to sew	bɔkɔ to climb	bɔ̀kù to chew

g			ɔga a chief		
h	bɔhi to wear out		bɔ̀hà to disturb		
kp	bùkpì to die	bɔ̀kpɛ̀ to cut hair	bɔ̀kpà to summon	bukpo to fight	
gb			ɔ̀gbà a leg	bɔ̀gbɔ̀ to eat	
l	eli heads	bɔlɛ to sleep	bɔ̀là to collect	bɔlɔ to name	lìlù yam
m	emi boundaries	ɔ́mɛ̀ this	bɔma to laugh	bumo to be satisfied	bùmù to keep water in mouth

n	bɔni to drink	bùnè to be long	bɔna to rain	bɔ̀nɔ̀ to urinate	bɔ̀nù to see
ɲ/ŋ	bɔ̀nyì to excrete	bunye to stand	bɔ̀nyà to trod	ínyó two	àŋu he, she, it
w	buwi to contain	ɔ̀wɛ a pestle		bɔ̀wɔ̀ to give birth	àwu a shirt
y	bɔ̀yì to be lost	buye to trade	bɔya to permit	bɔyɔ to want	buyu to steal

Consonant Clusters

A consonant cluster is defined as the sequence of two consonants within a single morpheme. There are two types of consonant cluster in Lɛ̀lɛ̀mi: sequences of C + l and sequences of C + w . The former will henceforth be referred to as "Cl- clusters" and the latter as "Cw- clusters."

Cl- clusters. The Cl- cluster also includes sequences of C + r , given earlier discussions of /l-r/ alternation. At least some of the Cl- clusters are the result of diachronic metastheses:

Likpe ɔ̀kɔlɔ̀ ~ Lɛ̀l. ɔ̀klɔɔ̀ 'canoe'

or of borrowings from other languages:

Twi okrama ~ Lɛ̀l. ɔ̀klàma 'dog'.

Following are some examples of Cl- clusters:

/pl/	plá'	'Splat!'
/tl/	bɔtra	'to depart'
/kl/	ɔ̀klàma, bà-	'dog'
	ɔ̀klantìɛ̀, lɛ̀-	'cutlass'

ɛ

	òklòfu, bà-	'young man'
	ɔ̀klɔɔ̀, lɛ̀-	'canoe'
	ɔ̀klɔɔ̀klɔ, bà-	'big brown squirrel'
/bl/	bɔbla	'to do'
	ùblɛbì, bɛ̀-	'young woman'
	ɔ̀blìwa, bà-	'old person'
	bliì	'small'
	àtiblùku	'God'
/dl/	kadruì, kɔ-	'compound'
/gl/	aglɔŋgɔ̀, ba-	'red palm-wine ant'
/vl/	avrùkpo	'God'
	bɔvruma	'to be different'

Cw- clusters. Not all sequences of C + w form true consonant clusters; some are, instead, merely the phonetic result of suffixing a vowel to a verb stem which happens to end in -u :

bɔ̀cùì 'to be burnt' ~ bɔ̀cùlà 'to burn'

bɔ̀kùì 'to be dried' ~ bɔ̀kùlà 'to dry'

Some examples of "true" Cw- clusters are:

/kw/	bɔ̀kwà	'to paint'
	bɔkwɛni	'to carry on one's back'
	ɔ̀kwɛ, lɛ-	'throat'
	lɛ̀kwà, à-	'year'
/bw/	bɔbwɛ	'to apologize, feel sorry'
	bɔ̀bwì	'to hunt'
	bùbwìlì	'to fall down'
	ebwo, be-	'animal'
	lìbwì, è-	'pot'
	kàbwa, kɔ̀-	'hat'
	kebwe, be-	'insect'
	libwo	'madness'
/dw/	kàdwɛɛ̀	'well' (adverb)
	budwo	'to welcome'
/fw/	bɔfwalà	'to drill a hole'
	bɔ̀fwàlà	'to be(come) bright, white, grey'
	bufwi	'to spit'
	bɔfwini	'to yell in anger'
	bɔ̀fwìɔ	'to be mistaken'
	bɔfwiɔ̀	'to suck (e.g., juice from orange)'
	bàfwìɔ	'idol, fetish'

/sw/	blí-swè	'very small'
/cw/	bɔcwɛ	'to forge metal'
	bɔ̀cwɛ̀	'to await'
	bɔcwi	'to be painful'
	ùcwili, bè-	'person'
	ǹcwɛni	'firewood'
/jw/	àjwi	'brains, intelligence'
/mw/	bɔmwamwà	'to crumple (e.g., paper)'
	bumwi	'to praise'
	bùmwè	'to smell (something)'
	ɔ̀mwɛmwɛ, bà	'firefly'
	limwi	'fat' (noun)
	ɔmwì	'today'
/ŋw/	bɔŋwa	'to cook'
	bɔ̀ŋwà	'to harvest'
	bɔŋwi	'to carve'
	liŋwi	'hair'
	aŋwɛŋwɛ, ba-	'bee'
	ɔ̀ŋwa, bà-	'sibling'
	úŋwí	'1'

The Vowel System

The vowels. There are seven phonemic vowels in the Baglɔ dialect of Lɛlɛmi, with values quite close to those of the primary cardinal vowels symbolized by [i, e, ɛ, a, ɔ, o, u]. In addition, there is a surface vowel [ɩ], rather more open than [i], which is an optional allophone of /i/ which occurs only in a syllable of a noun stem which is followed by another syllable in the same word ending in /i/ .

[animì]	~	[anɩmì]	'rice'
[kubitì]	~	[kubɩtì]	'happiness'

Vowels may be phonologically nasalized (and, in other dialects, phonetically nasalized as well); in the Baglo dialect, however, the only phonetic correlation to phonological nasalization occurs when the vowel which is phonologically nasalized precedes a stop consonant within the same Noun Phrase; for example, although the Verb Stem -ku 'chew' is phonologically nasalized, there is no phonetic nasalization associated with it either in the infinitival form bɔku 'to chew' or in the finite form bɔ́kù 'we chewed' as in

bɔ́kù kàbɛ̀.

1p+PAS+chew fish

'We ate a fish.'

There is surface nasalization, however, in the participle formed from -ku 'chew',

ɔ̲̀.kundi 'chewable'

That the surface nasality is conditioned by a stop consonant within the same Noun Phrase--a restriction which might seem to be odd--is illustrated by the difference in the realizations of ɔtɔ, lɛ- 'house' in the third of the following sentences as compared to the first two.

úsè ɔtɔ.

3s+PAS+go house

'He went home.'

úsè ɔtɔ kàmàdì.

3s+PAS+go house yesterday

'He went home yesterday.'

úsè ɔtɔ ŋ kemo.

3s+PAS+go house Ø inside.

'He went into the house.'

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The simplest explanation is that in the second sentence kàmàdì 'yesterday' was outside the Noun Phrase containing ɔtɔ , whereas in the last sentence kemo 'inside' was inside the Noun Phrase containing ɔtɔ . That this explanation is probably correct is shown even more clearly when we consider parallel sentences with ɔma, lɛ- 'town', a word in which we could expect a carry-over of nasalization to a following word because of the natural nasalization induced by /m/ ; we find, however, that ɔma, lɛ- 'town' works just like ɔtɔ, lɛ- 'house'.

úsè ɔma.
3s+PAS+Go town
'He went to (his home) town.'
úsè ɔma kàmàdì
3s+PAS+go town yesterday
'He went to (his home) town yesterday.'
úsè ɔma ŋ kemo.
3s+PAS+go town Ø inside
'He went into town.'

(See Hyman (1972) for a discussion of the development of nasals and nasalized vowels in Kwa and in TRLs.)

Although there are only seven phonemic, surface vowels in Lɛlɛmi, it is necessary to posit a system of nine underlying vowels in order to account for the facts of the language adequately; these nine underlying vowels are /I, i, e, ɛ, a, ⊃, o, u, U/ . The following distinctive feature matrix schematizes both the surface and the underlying vowels.

	I	i	e	ɛ	a	⊃	o	u	U
High	+	+	–	–	–	–	–	+	+
Low	–	–	–	–	+	–	–	–	–
Back	–	–	–	–	–	+	+	+	+
Advanced	+	–	+	–	–	–	+	–	+

Figure III

Matrix for Vowels

/I/	bùtì	'to take'
/i/	bɔti	'to know'
/e/	bùtè	'to give'
/ɛ/	bɔ̀tɛ̀	'to judge'
/a/	bɔ̀tà	'to rise'
/o/	bumo	'to be satisfied'
/ɔ/	bɔ́mɔ̀	'those'
	bɔ̀tɔ̀	'to be worn out'
/U/	bùtù	'to spit'
/u/	bɔ̀dù	'to bite'

Figure IV

Vocalic Contrasts

For the most part, these features are self-explanatory. The features [High] and [Low], for example, are approximately equivalent to the terms "Close" and "Open," respectively, in referring to the extent of tongue raising or lowering and associated mouth opening; hence, since the vowels /e, ɛ, ɔ, o/ are all Mid vowels, they all have the distinctive feature specification of $\begin{bmatrix}-\text{High}\\-\text{Low}\end{bmatrix}$. The feature [Advanced] is the Buɛm equivalent of the articulatory feature Stewart (1967, 1970) calls Root Advancing, which refers to the position of the root of the tongue for a particular vowel; vowels which are specified as [+Advanced] are those which traditionally have been called "Tense", and those which are specified as [-Advanced] are those which traditionally have been called "Lax." Since I have performed no instrumental work on Buɛm, I am using the feature [Advanced] primarily as a "Cover term."

Vowel harmony. Buɛm has "cross-height" vowel harmony, a type of vowel harmony, quite common in West Africa, in which

> ... on the basis of the harmony, the vowels of the language in question can be divided into two mutually exclusive sets such that (i) the tongue positions of the vowels of one of the sets are high in relation to the tongue positions of their counterparts in the other set, but (ii) the tongue position of at least one member of the relatively high set is lower than the tongue position of at least one member of the relatively low set. (Stewart, 1971:198)

In Buɛm, vowel harmony entails that all vowels of a polysyllabic word, with the exception of compound nouns, unassimilated loan words, and certain verbs marked for Aspect, shall either be all [+Advanced] or all [-Advanced], and cannot change their specification until all selectional rules have applied. The vowel harmony pattern of a stem (e.g., a Noun Stem or a Verb Stem) is "given" and conditions the vowel harmony pattern of affixes, the most important of which are prefixes.

Phonologically, there are four different "shapes" that a prefix can take:

i. Ø- ,
ii. N- ,
iii. V- , and
iv. CV- .

Vowel harmony is irrelevant to the first two, Ø and N- ; the last two, V- and CV- , can be considered together. There are three pairs of vowels which can occur in prefixes, with one member of each pair being used when the word stem has [+Advanced] vowels and with the other member being used when the word stem has [-Advanced] vowels. The archiphoneme of each pair is symbolized by a capital letter, and the pairs in question are:

	[+Advanced]	[-Advanced]
A	/e/	/a/
E	/I/	/ɛ/
O	/U/	/ɔ/

A glance at the distinctive feature matrices for the archiphonemes and the pairs subsumed will make the relationships between the pairs clearer; symbols marked by "α"s co-vary.

$$A- = \begin{bmatrix} -\text{High} \\ -\alpha\text{Low} \\ -\text{Back} \\ \alpha\text{Advanced} \end{bmatrix} \qquad E- = \begin{bmatrix} \alpha\text{High} \\ -\text{Low} \\ -\text{Back} \\ \alpha\text{Advanced} \end{bmatrix}$$

$$O- = \begin{bmatrix} \alpha\text{High} \\ -\text{Low} \\ +\text{Back} \\ \alpha\text{Advanced} \end{bmatrix}$$

Figure V shows which prefix vowels can co-occur with which stem vowels; again, selection of the stem vowel determines whether the prefix vowel is [+Advanced] or [-Advanced].

	Prefix			Stem				
	A	E	O					
[+Advanced]	e	I	U	I	e	---	o	U
[-Advanced]	a	ɛ	ɔ	i	ɛ	a	ɔ	u

Figure V

Patterns of Vowel Harmony

Following all the selection rules, a low-level phonological rule causes /I/ to merge with /i/ and /U/ to merge with /u/ .

While this outline may seem rather complicated, the following paradigms should show how simple the system really is. The verbs form minimal pairs on the basis of $\begin{bmatrix}\pm\text{Advanced}\end{bmatrix}$ and are presented in the Affirmative Simple Past (see p. 255 ff).

bɔ̀tɛ̀	'to judge'		bùtè	'to give'	
([-Advanced])			([+Advanced])		
lɛ́tɛ̀	I	judged	lítè	I	gave
átɛ̀	You, A-		étè	You, A-	
ɔ́tɛ̀	He, O-		útè	He, O-	
bɔ́tɛ̀	We, N, BO-		bútè	We, N, BO-	
bɛ́tɛ̀	You		bítè	You	
bátɛ̀	They, BA-		bétè	They, BA-	
lɛ́tɛ̀	LE-		lítè	LE-	
kátɛ̀	KA-		kétè	KA-	
kɔ́tɛ̀	KO-		kútè	KO-	

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bɔ̀dù	'to bite'		bùdù	'to arrive'	
([-Advanced])			([+Advanced])		
lɛ́dù	I	bit	lídù	I	arrived
ádù	You, A-		édù	You, A-	
ɔ́dù	He, O-		údù	He, O-	
bɔ́dù	We, N, BO-		búdù	We, N, BO-	
bɛ́dù	You		bídù	You	
bádù	They, BA-		bédù	They, BA-	
lɛ́dù	LE-		lídù	LE-	
kádù	KA-		kédù	KA-	
kɔ́dù	KO-		kúdù	KO-	

A great many other verbs are differentiated on the basis of [±Advanced].

Vowel harmony also serves to differentiate a good many nouns as well, though here the distinctions made by different noun class prefixes are much more important.

àsɛ, bà-	'bird'	~	èse, bè-	'goat'
atu, ba-	'elephant'	~	etu, be-	'flying ant'
kɔtu, a-	'ear'	~	kutu etu	'soup' 'flying ant'

(See Ford (in press) for a discussion of vowel harmony in other TRLs and in Ewe.)

Reduced vowel harmony. As I have stated, verbs marked for Aspect form one of the exceptions to the rules of vowel harmony. These verb forms, whose morphology and paradigms are treated on pp 281 ff , function in terms of a reduced vowel harmony. The Aspect markers all have the structure -(C) A (A)- , and these always harmonize with the Verb Stem, so that, for example, the Go-itive marker -TA- (see pp. 290ff) is realized as /-ta-/ before a Verb Stem with [-Advanced] vowels and as /-te-/ before a Verb Stem with [+Advanced] vowels. Similarly, non-High prefixes (i.e., those with the structure (C)A-) harmonize with the Aspect marker and the Verb Stem. Non-Low prefixes, however, all have the [+Advanced] allomorphs, so that the third person singular prefix, for example, O- is realized as /u-/ before an Aspect marker plus Verb Stem, regardless of whether they have [+Advanced] vowels or [-Advanced] vowels. Hence, we no longer have a set of six prefix vowels, but instead one of four, as illustrated in Figure VI .

	Prefix			Aspect	Stem				
	A	E	O	A					
[+Advanced]	e	I	U	e	I	e	---	o	U
[-Advanced]	a	I	U	a	i	ɛ	a	ɔ	u

Figure VI

Reduced Vowel Harmony

(As before, /I/ merges with /i/ and /U/ merges with /u/ .) The difference between the two systems of full harmony and reduced harmony can be seen if the paradigms on pp. 64ff are compared with the paradigms overleaf, which are in the Negative Past. (The Negative marker is -TÁ-).

bɔ̀tɛ̀	'to judge'	
ńtátɛ̀	I	didn't judge
átátɛ̀	Yɔu, A-	
útátɛ̀	He, O-	
bútátɛ̀	We, N, BO-	
bítátɛ̀	You	
bátátɛ̀	They, BA-	
lítátɛ̀	LE-	
kátátɛ̀	KA-	
kútátɛ̀	KO-	

bùtè	'to give'	
ńtétè	I	didn't give
ététè	You, A-	
útétè	He, O-	
bútétè	We, N, BO-	
bítétè	You	
bététè	They, BA-	
lítétè	LE-	
kététè	KA-	
kútétè	KO-	

bɔ̀dù	'to bite'	
ńtádù	I	didn't bite
átádù	You, A-	
útádù	He, O-	
bútádù	We, N, BO-	
bítádù	You	
bátádù	They, BA-	
lítádù	LE-	
kátádù	KA-	
kútádù	KO-	

bùdù	'to arrive'	
ńtádù	I	didn't arrive
étédù	You, A-	
útédù	He, O-	
bútédù	We, N, BO-	
bítédù	You	
bétédù	They, BA-	
lítédù	LE-	
kétédù	KA-	
kútédù	KO-	

The way in which we deal with the data depends on the extent to which we want to allow diachronic information into the synchronic description of the language. On a purely synchronic level, the six Aspect markers can be handled in a two-step operation: in the first step, the overall vowel harmony rule is applied to the verb, and in the second step an _ad hoc_ rule obligatorily makes all Non-Low prefixes [+Advanced] (and [+High] too, since the feature of [±High] co-varies for Non-Low prefixes with that of [±Advanced]).

Vowel Harmony

$$\begin{array}{ccccccc} \# & (C) & V & C(C) & V & ((C) & V)^{*} \\ & & [\alpha\text{Adv}] & & [\alpha\text{Adv}] & & [\alpha\text{Adv}] \end{array}$$

where * = iterative potential

Ad hoc Non-Low Prefix rule

$$\begin{bmatrix} \alpha\text{High} \\ -\text{Low} \\ \alpha\text{Adv} \end{bmatrix} \Longrightarrow \begin{bmatrix} +\text{High} \\ -\text{Low} \\ +\text{Adv} \end{bmatrix} \; / \; \underline{\qquad} \; \text{Aspect}$$

This analysis, then, presumes that the underlying form for útátɛ̀ 'he didn't judge' would be *ɔ́tátɛ̀ , that the underlying form for bítádù 'You didn't bite' would be *bɛ́tádù , etc.

While the process outlined above is descriptively adequate, it certainly doesn't explain why Non-Low prefixes are always $\begin{bmatrix}\text{+High}\\ \text{+Adv}\end{bmatrix}$ before an Aspect marker. If we allow historical/comparative evidence, however, we can both describe and explain the forms of the prefixes used before an Aspect marker, thought at the cost of some complexity in the rules.

Although the sound variously transcribed as [ɜ , œ] or [ə] no longer occurs as a surface vowel of Buɛm, it does still occur as a surface vowel in Likpe, as the [+Advanced] counterpart of /a/ , which is [-Advanced] in both Likpe and Buɛm. Although as yet I have not been able to work out the full pattern of Likpe-Lɛlɛmi-Lɛ̀fana correspondences, one fact is quite clear: while Likpe noun stems with the /ɜ/ vowel tend to have Lɛlɛmi and Lɛ̀fana cognates with the [-Advanced] vowel /a/ , Likpe verb stems with the /ɜ/ vowel have Lɛlɛmi cognates with (usually) the [+Advanced] /i/ or the [+Advanced] /e/ . Assuming that the present Aspect marker--or at least some of them--have developed from verbs in Proto-

Buɛm, the not too distant ancestor of Likpe, Santrokofi, Akpafu/Lolobi, and Lɛlɛmi/Lɛ̀fana, and that the forms in the proto-language contained the * з, what guesses can we make as to the historical development?

i. There is some evidence, though again not fully worked out, that current system of vowel harmony in the TRLs were developed into virtually their present forms well before the Proto-Buɛm group split off from the other TRLs. It is, therefore, safe to assume that if the ancestor of the Aspect marker had a [+Advanced] vowel, then the prefix to that Aspect marker also had a [+Advanced] vowel. There would be no change in the harmony pattern of the prefix and Aspect marker yet, even though the two might be affixed to a subsequent verb; this can be deduced comparatively on the basis of the harmony patterns of compound verbs in Igbo, for example, and internally on the basis of compound and derived noun formation in Buɛm. Synchronically, this would be represented by a rule like the Vowel Harmony rule of p. 70 , which applies to all words in Buɛm consisting of only one stem and affixes and to the prefix and first stem of derived and compound nouns.

ii. The Aspect markers become fully bound and get reanalyzed as derivational affixes, parallel to the causative suffix (see pp. 147ff). As a derivational affix, the Aspect marker would thereby fall under the scope of the Vowel Harmony rule, though there is no reason to assume that its prefix would also fall under the scope of a reapplication of the Vowel Harmony rule. Synchronically, this would be effected by a rule shifting a boundary symbol from the right of the Aspect marker, where the boundary symbol preceded the following Verb Stem, to the left of the Aspect marker, where it would follow the prefix.

SD: # (C) V (C) V (V) # C V X
SC: # (C) V # (C) V (V) C V X

where X = any possible syllables or Ø

followed by re-application of the Vowel Harmony rule.

iii. As part of the reanalysis of the Aspect marker as a derivational affix, its vowel gets assimilated to fit in with the rest of the vowel system by a rule like

3 Assimilation

$$\begin{bmatrix}-\text{High}\\+\text{Low}\\-\text{Back}\\+\text{Adv}\end{bmatrix} \;\; ====) \;\; \begin{bmatrix}-\text{High}\\-✓\text{Low}\\-\text{Back}\\✓\text{Adv}\end{bmatrix} \;\; / \;\rule{2em}{0.4pt}\; (\text{C}) \begin{bmatrix}✓\text{Adv}\end{bmatrix}$$

According to this, a verb form like útátì 'he didn't judge' would have passed through the following stages:

$$\text{a.}\quad * \;\; \# \;\; \underset{[+\text{Adv}]}{0} \;\; \underset{[+\text{Adv}]}{\text{T3}} \;\; \# \;\; \underset{[-\text{Adv}]}{-\text{tì}} \qquad ======)$$

$$\text{b.}\quad * \;\; \# \;\; \underset{[+\text{Adv}]}{0} \;\; \# \;\; \underset{[+\text{Adv}]}{\text{T3}} \;\; \underset{[-\text{Adv}]}{-\text{tì}} \qquad ======)$$

$$\text{c.}\quad * \;\; \# \;\; \underset{[+\text{Adv}]}{0} \;\; \# \;\; \underset{[-\text{Adv}]}{\text{tá}} \;\; \underset{[-\text{Adv}]}{-\text{tì}} \qquad ======)$$

d. útátì

iv. Finally, if the verb has a Non-High prefix, the prefix harmonizes with the rest of the word and has the same height as the vowel of the Aspect marker. This would be accomplished by a rule like the 3 Assimilation rule, which is very close to the structure rule for Non-High prefixes (see page 63).

This proposed diachronic analysis is speculative in places, but should be correct in its general outline; it is uncertain, however, to what extent the synchronic description of the language should incorporate this diachronic analysis.

The chart below lists the allomorphs of all the prefixes which are subject to Vowel Harmony, both in their full Vowel Harmony forms and in their reduced Vowel Harmony forms.

Prefix	Full Harmony [+Advanced]	Full Harmony [-Advanced]	Reduced Harmony [+Advanced]	Reduced Harmony [-Advanced]
O-	u-	ɔ-	u-	u-
A-	e-	a-	e-	a-
BA-	be-	ba-	be-	ba-
BE-	bi-	bɛ-	bi-	bi-
BO-	bu-	bɔ-	bu-	bu-
KA-	ke-	ka-	ke-	ka-
KO-	ku-	kɔ-	ku-	ku-
LE-	li-	lɛ-	li-	li-
MO-	mu-	mɔ-	mu-	mu-
NA-	ne-	na-	ne-	na-

Figure VII

Allomorphs of Prefixes

Tone

Buɛm is a register-type tone language with three level tones, called High, Mid, and Low.

úsè ɔtɔ

H L M M

3s+PAS+go house

'He went home.'

I perceive the interval between the High tone and the Mid tone as being "less" than that between the Mid tone, and Lo tone

In addition to the three level tones, there are two gliding tones, one which glides from Mid or High to Low,

bliì	'few, little'
fwiì	'all, every'

and one which glides from Low to Mid,

àasɛ̀	'bird'

These gliding tones, however, are undoubtedly merely the phonetic result of a difference in the level of tone in two adjacent syllables which are not separated by any consonant; for this reason, these gliding tones do not have "tonemic" status (cf. Welmers, 1959) in the same way as

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the three level tones.

Although the tones of particular classes of words may vary according to well-defined rules (e.g., the rules of tone change associated with possession on pp. 161-6), I have not identified any tonal "down-drift" or "terracing" analogous to that found in languages such as Igbo; a Mid tone towards the end of a sentence, even a fairly long sentence, seems to be on about the same pitch as a Mid tone towards the beginning, and it is never the case that a Low tone towards the end of a sentence is higher than a Mid tone anywhere in the sentence. "Down-step," however, (as opposed to "down-drift") does sometimes occur in possessive constructions.

Tone functions both lexically and syntactically. Lexical tone (in this grammar, called "inherent tone") refers to the tone that a particular word has in isolation or in some other specifiable "frame" (see Pike (1948)) and can differentiate between two words of the same word class which would otherwise be identical.

ɔ̀fɛ̀ 'calabash' ~ ɔfɛ 'sun'

lìlu	'roads'	~	lìlù	'yam'
bɔdu	'to kill'	~	bɔ̀dù	'to bite'
bɔta	'to sting'	~	bɔ̀tà	'to rise'

Inherent tone is especially important in the differentiation of nouns and in the differentiation of Verb Roots. Nouns are divided into two groups on the basis of their inherent tones. One group, much the smaller of the two, consists of those nouns which have three or more tones:

ùtsuli, bè-	'person'
àdìlà	'food'
lɛnimì, a-	'eye'
àasɛ̀, bà-	'bird'
ɔ̀sikà, lɛ̀-	'knife'
ɔ̀klɔɔ̀, lɛ̀-	'canoe'
ɔ̀klantìɛ̀, lɛ̀-	'cutlass'
lìgulabi	'money'
ɔ̀klàma, bà-	'dog'
ɔ̀nànà, bà-	'man'

Most of these nouns have prefixes on Low tone, and the inherent tone of nouns with three or more tones does not change in possessive constructions. The other group, which contains the vast majority of the nouns in Buɛm, consists of nouns which have only two tones; this group is itself divided into three sub-groups:

i. Nouns with tones Low-Low

àtù, bà-	'elephant'
ùbì, bè-	'child'
kàbɛ̀, kɔ̀-	'fish'

ii. Nouns with tones Mid-Mid

ɔtɔ, lɛ-	'house'
kuli, e-	'head'
kani, ba-	'porcupine'

and

iii. Nouns with tones Low-Mid

lìfu, è-	'abandoned farm'
kɔ̀yu, à-	'spirit, soul'
èse, bè-	'goat'

I have not found any disyllabic nouns with tones Mid-Low. The greatest number of minimal pairs is between nouns with tones Low-Mid and nouns with tones Low-Low:

lìlu	'roads'	~	lìlù	'yam'
ɔ̀kɔ	'a lie'	~	ɔ̀kɔ̀	'sputum'
bàna	'scorpions'	~	bànà	'men'

bàti	'cats'	~	bàtì	'fathers'
lɛ̀gba	'a proverb'	~	lɛ̀gbà	'feet'
ɔ̀ja	'fire'	~	ɔ̀jà	'a husband'
èsɛ	'a goat'	~	èsɛ̀	'horns'

I have found one minimal triplet of nouns differentiated by tone and tone alone:

lɛ̀nyì, à-	~	lɛ̀nyi, à-	~	lɛnyi, a-
'breast'		'tooth'		'name'

one contrast Low-Mid and Mid-Mid:

ɔ̀kpɛ, bà- 'toddler' ~ ɔkpɛ, ba- 'grasscutter'

and one contrast Low-Low and Mid-Mid:

ɔ̀fɛ̀ 'calabash' ~ ɔfɛ 'sun'

While a noun's noun class membership seems to bear little or no relationship to its tone, it seems that there are more nouns referring to animates which have Low tone prefixes than there are with Mid tone prefixes. The tone pattern of a disyllabic noun may be affected by certain constructions like the Possessive.

Like nouns, Verb Roots can be divided into two groups on the basis of tone. One group, again very much smaller than the other, consists of Verb Roots which have two or more tones (Note that the tone of the Verb Prefix is NOT included in the number of tones):

bɔtɛmi	'to speak'
bɔlɛmi	'to open'
bɔ̀bɔ̀mɔdi	'to try'
bɔ̀kàkà	'to shine brightly'

The other group consists of Verb Roots containing only one tone, the tone of affixes excluded, and is subdivided into Mid tone Verb Roots and Low tone Verb Roots, based on their tone in the Infinitive:

bɔdu	'to kill'	~	bɔ̀dù	'to bite'
bufwi	'to spit'	~	bùfwì	'to be sick'
bɔta	'to sting'	~	bɔ̀tà	'to rise'
bɔfɔ	'to accept'	~	bɔ̀fɔ̀	'to wash'
bɔdia	'to suffice'	~	bɔ̀dìa	'to be good'

High tones are never found in Noun Stems nor in Verb Roots or Verb Stems.

Syntactically, tone characterizes certain constructions, such as the Affirmative Past Progressive and the Affirmative Present Progressive:

ɔ́ɔdu	'he has killed'	~	ɔ̀ɔ̀du	'he is killing'
ɔ́ɔ̀dù	'he has bitten'	~	ɔ̀ɔdù	'he is biting'

In these cases, the inherent tone of a morpheme may be altered by the effects of the syntactic tone(s) associated with the construction, as for the Negative Future:

ùládù 'he won't kill' ~ ùlàdu 'he won't bite'

Part III. The Sentence.

The Sentence

Sentences can be divided into four types on the basis of clause structure:

i. Simple sentences, consisting of only one clause,

ii. Compound sentences, consisting of two or more clauses joined by a co-ordinate conjunction,

iii. Complex sentences, consisting of a main clause and a subordinate clause introduced by a subordinate conjunction, and

iv. Compound complex sentences, consisting of two or more sentences, at least one of which is a complex sentence, joined by a co-ordinate conjunction. (Relative clauses are not considered for the purpose of this classification, nor are verbal complement clauses.) I deal with compound and complex sentences in Part VI.

Sentences can be further classified as to whether they are:

i. Declarative,
ii. Interrogative,
iii. Imperative, or
iv. Exclamatory,

with Interrogative, Imperative, and Exclamatory sentences being considered as essentially being optional variants of Declarative sentences; the reason for this is that all the rules which apply to Declarative sentences also apply to the other three types of sentence, but the converse does not hold.

P 1. $\# \quad S \quad (\text{Conj}_C + S)^* \quad \#$

P 2.

$$S \longrightarrow (\text{Conj}_S + \text{Sent})^* \ \text{Sent} \ \left(\begin{Bmatrix} \text{INTER} \\ \text{IMPER} \\ \text{EXCLAM} \end{Bmatrix} \right)$$

(The asterisk, *, following a symbol denotes the possibility of indefinite recursion.)

Questions. Buεm has both Yes-No questions and the equivalent of English Wh- questions, which entail the use of an interrogative word; I discuss Wh- questions on pp. 455-9 . Other than through the use of an interrogative word, questions differ from statements in that the final syllable of the sentence is prolonged and is on a Mid tone; if the final syllable is a -V- type syllable, then the penultimate syllable is also on a Mid tone. This applies to both Yes-No and Wh- questions.

T 1. $C\ (\dot{V})\ V_1^{+\text{INTER}}\ \Longrightarrow\ C\ (\overset{'}{V})\ \overset{'}{V}_1\ \overset{'}{V}_1$

This can be illustrated by the following sentences:

1a. banabì béyù àkɔkɔ̀.
boys 3p+PAS+steal chicken
'The boys stole a chicken.'

b. banabì béyù àkɔkɔɔ?
boys 3p+PAS+steal chicken?
'Did the boys steal a chicken?'

2a. lɛ́dìà.
LE+PAS+be-good
'It's OK.'

b. lɛ́diaa?.
LE+PAS+be-gɔɔd?
'Was it OK?'

3a. àaŋwà lìlù.

2s+PRES+harvest yam

'You are harvesting yams.'

b. àaŋwà lìluu?

2s+PRES+harvest yam?

'Are you harvesting yams?'

4a. banam bálɛ̀.

children 3p+PAS+sleep

'The children slept.'

b. banam bálɛɛ?

children 3p+PAS+sleep?

'Did the children sleep?'

Exclamations. Exclamations differ from statements in that exclamations end in oo .

5. banabì béyù àkɔkɔ̀ oo.

boys 3p+PAS+steal chicken!

'The boys stole a chicken!'

6. lɛ̀dìa oo.

LE+PRES+be-good!

'It's fine!'

7. àaŋwà lìlù oo.
2s+PRES+harvest yam!
'You're harvesting yam!'

8. banam bálɛ̀ oo.
ćhildren 3p+PAS+sleep!
'The children slept!'

Imperatives. I discuss imperatives on pp. 320-3 .

Basic clause structure. With one exception, discussed on p 334 , all sentences, whether they are declarative, interrogative, exclamatory, or imperative, have a Noun Phrase (NP) as their subject followed by a Verb Phrase (VP):

P 3. Sent ---) NP + VP

This is the case even when there is no overt subject since the subject of a sentence can be deleted optionally when the verb agrees with the subject in person or noun class and in number (see page 333).

9. banabì béyù àkɔkɔ̀.
'The boys stole a chicken.'

can yield

10. béyù àkɔkɔ̀.

'They stole a chicken.'

since béyù agrees with banabì in noun class and number, but

11. banabì néyù àkɔkɔ̀.

boys REL+PAS+steal chicken

'Boys stole a chicken.'

cannot yield

12. *néyù àkɔkɔ̀

*'stole a ~~dog~~ chicken',

since néyù does not agree with banabì in noun class and number, so there could be no recoverable deletion of the subject of the sentence.

Part IV. The Noun Phrase

Types of Noun Phrase

There are three types of Noun Phrase:

i. a Nominal type (Nom),
ii. a Pronominal type (Pro), and
iii. an Infinitival type (InfP).

Both the Nominal type of Noun Phrase and the Pronominal type may be followed by an optional Quantifier (Quant), discussed on p 209 ff.

$$\text{P4}\quad \text{NP} \text{ --------) } \left\{ \begin{matrix} \left\{ \begin{matrix} \text{Nom} \\ \text{Pro} \end{matrix} \right\} \ (\text{Quant}) \\ \text{InfP} \end{matrix} \right\}$$

The Nominal Type of Noun Phrase

The Nominal type of Noun Phrase consists of a Noun (N), which may be modified by a Possessor (Poss) preceding it and/or by other Modifiers (Modif) following it.

P5 Nom -------) (Poss) N (Modif)

There are three types of Noun:

i. Simple Nouns (N_{Simp}),
ii. Compound Nouns (N_{Comp}), and
iii. Derived Nouns (N_{Der}).

$$\text{P6} \quad N \text{ ----------------) } \begin{cases} N_{Simp} \\ N_{Comp} \\ N_{Der} \end{cases}$$

Simple Nouns

A Simple Noun consists of a Noun Class marker (NC) followed by a Noun Stem (NSt) followed by an optional Noun Suffix (NSuff).

$$\text{P7} \quad N_{Simp} \text{ -------) } \quad NC \quad + \quad NSt \quad (NSuff)$$

The form and function of the Noun Class markers is discussed on p 97 and on pp 119ff ; the form of the Noun Suffixes is discussed on p 117 . Since the phonological form of the Noun Stem has been discussed on pp39 & 77 I will concern myself here solely with a discussion of its syntax. Basically, the Noun Stem contains everything one needs to know about a noun in order to use it correctly in a sentence. In an Aspects-model TG, this knowledge is considered as being of two sorts, one phonological and the other syntactic, both coming together to form a "lexical entry" (Chomsky, 1965:84 ff and passim). The syntactic information is contained in a "Complex Symbol" (CS_N) which consists of a variety of features characteristic of the use of that noun:

P8 NSt ------- CS_N

While some of these features are contextual, most can be described in terms of selectional features. The features I use for Buɛm include information on the following:

i. What Noun Class(es) the noun belongs to, a contextual feature symbolized as, e.g., [Ia__], [Ib__], [II__], [III__], ... , [XVII__];

ii. Whether the noun is animate [±Animate];

iii. If [+Animate], whether the noun is human [±Human];

iv. If [-Animate], whether the noun is a count noun [±Count];

v. If [-Count], whether the noun is an abstract noun [±Abstract]; and

vi. If [-Animate], whether the noun is a place noun [±Place].

Obviously, these categories of formal features form only a partial sampling of the total features possible, and there are a great many more categories which could be proposed to exclude the equivalent of

*John is baking a book.;

however, a point of diminishing returns soon sets in, and the six features I use should be sufficient to categorize nouns for this grammar.

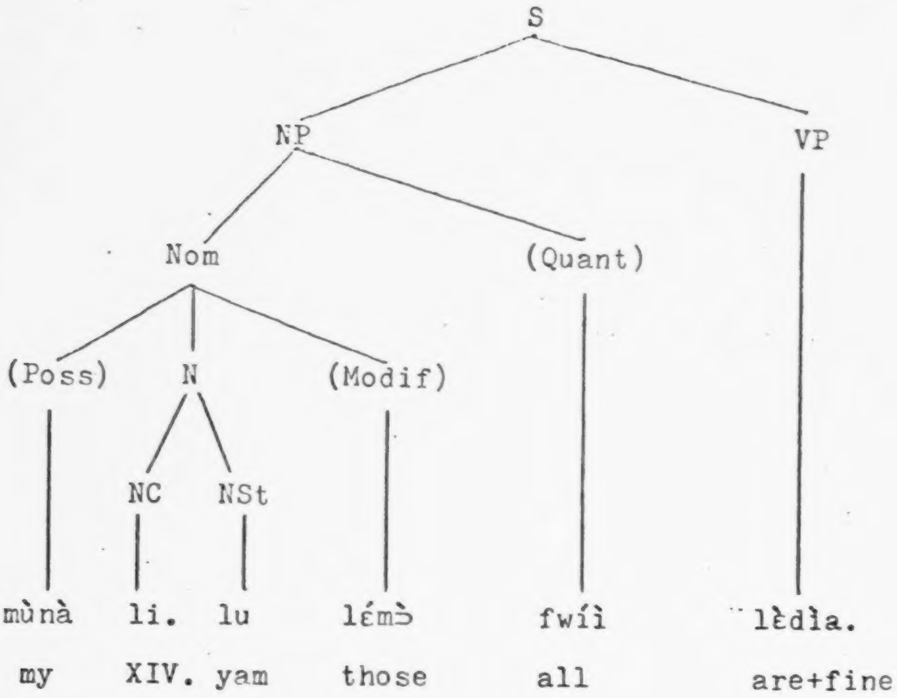
In the sample lexicon below, I have used some principles of redundancy (cf. Chomsky, 1965:164 ff) in collapsing the number of features stated explicitly: for example, since all [+Human] nouns are also [+Animate], the feature [+Animate] is redundant and can be omitted. Similarly, since all [+Abstract] nouns are both [-Count] and [-Animate], the latter two features are also redundant and can be omitted. In one sense, it is redundant to give the Noun Stem together with the prefix(es) that it takes and to state in the complex symbol which prefix(es) can occur with the Noun Stem; however, there is some justification for this since the Noun Class prefixes also indicate the vowel harmony pattern of the Noun

Stem and dɔ carry tone.

Sample Lexicon

ɔ.namù	ba-	[Ia__, +Human]	'child'
ò.lòku	bè-	[Ia__, +Human]	'woman'
è.se	bè-	[Ib__, +Animate]	'goat'
ɔ.tɔ̄	lɛ-	[II__, -Animate, +Count]	'house, room'
li.bwi	e-	[IV__, -Animate, +Count]	'pot'
kà.jì	bà-	[V__, +Animate]	'monkey'
kà.bwa	kɔ̀-	[VI__, -Animate, +Count]	'hat'
kɔ.di	a-	[VIII__, -Animate, +Count]	'cloth'
n.tɛ		[XI__, -Count, -Abstract]	'palm wine'
a.nimì		[XII__, -Count, -Abstract]	'rice'
kɔ.sɔ		[XVI__, -Count, +Abstract]	'thinness'
$\begin{bmatrix}\text{u}\\ \text{ku}\end{bmatrix}$ji	$\begin{bmatrix}\text{li-}\\ \text{e-}\end{bmatrix}$	$\left[\begin{bmatrix}\text{II\_\_}\\ \text{VIII\_\_}\end{bmatrix}\text{, -Animate, +Count}\right]$	$\begin{bmatrix}\text{'stick'}\\ \text{'tree'}\end{bmatrix}$

At this stage, a (partly pruned) derivational tree would look something like Figure VIII



'All those yams of mine are fine.'

Figure VIII

Partial Expansion of NP

The Noun Class System

Every noun in Lɛ̀lɛ̀mi belongs to one of 18 different noun classes. These noun classes are like gender in languages such as French, German, or Latin in that both noun class membership and gender determine the form of concord and agreement in word classes like adjectives, determiners, pronouns, and finite verb forms; a system of noun classes differs from a gender system, however, in that a noun in a language with a noun class system has its noun class membership marked morphologically in the noun itself --in the case of Lɛ̀lɛ̀mi and other TRLs by prefixing the Noun Class marker to the Noun Stem--whereas the gender of a noun in a language with a gender system is oftentimes not shown in the noun itself, but is marked rather in the agreement forms alone, which may be independent of the morphological shape of the noun. The distinction between the two systems can be brought out clearly by contrasting the words for 'house' in Lɛ̀lɛ̀mi and French: the O- prefix to the Lɛ̀lɛ̀mi word ɔtɔ shows instantly and unambiguously that ɔtɔ is a member of a class of nouns whose concord and agreement forms are formed by O- :

ɔ.tɔ ɔ̀.fwaladì ɔ́.mɛ̀ ɔ̀.dìa.
O.house O.white O.this O.is+good.
'This white house is good.'

There is no analogous marking, however, in the French word maison to show that maison is a member of a class of nouns which have feminine concord and agreement forms:

Ce.tte maison blanc.he est bon.ne.
This.Fem house white.Fem is good.Fem.
'This white house is good.'

De Wolf (1971:32ff) discusses the difference between gender systems and noun class systems in rather more detail.

There are nine different prefixes which are used to indicate noun class membership; the posited underlying representations of these prefixes are A-, O-, BA-, BO-, KA-, KO-, LE-, N-, and 0 , with surface realizations as described on page 75. The total of 18 noun classes is the result of the use of some of these prefixes to mark the singular forms of some nouns and the plural forms of others: there are 10 noun classes in which the singular form of the noun has a different prefix from the plural form and 8 noun classes in which there is no difference in the prefix, regardless of whether the noun is singular, plural, or mass. Figure IX tabulates the possible combinations of Noun Class prefixes to form the different noun classes together with the number of members of each noun class in a fairly representative sample of 308 non-derived nouns.

There is still a great deal of semantic content attached to individual noun classes, in the sense that the nouns associated with particular categories of natural objects tend to belong to particular noun classes: I can be fairly sure, for example, that if I elicit the name of a bird previously unknown to me, that name will belong to Class III, LE/BA, even before my informant's response.

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	Singular	Plural	Frequency
Ia.	O-	BA-	45
b.	A-	BA-	24
II.	O-	LE-	51
III.	LE-	BA-	16
IV.	LE-	A-	47
V.	KA-	BA-	15
VI.	KA-	KO-	34
VII.	KO-	BA-	4
VIII.	KO-	A-	20
IX.	KA-	N-	3
X.	Ø-	BA-	5

	Mass (Common)	
XI.	N-	9
XII.	A-	11
XIII.	O-	7
XIV.	LE-	17
XV.	KA-	8
XVI.	KO-	6
XVII.	Ø-	10
XVIII.	BO-	*

Figure IX

The Noun Classes

* All members are derived

Noun Class Ia., O/BA, contains most animate nouns which

i. Refer to humans:

ɔ̀nànà	bànànà	'man'
òlòku	bèlòku	'woman'
ubi	bebi	'child'
ɔ̀ti	bàti	'father'
ɔ̀ŋwa	bàŋwa	'sibling'
ɔ̀kpɛ	bàkpɛ	'toddler'
ɔ̀kpàna	bàkpàna	'companion'
ɔ̀fɔ	bàfɔ	'stranger'
ɔga	baga	'chief'
ùcwiri	bècwiri	'person'

ii. Which show reduplication:

ɔ̀gbaŋgbà	bàgbaŋgbà	'Pied crow'
ɔ̀kɔɔ̀kɔ	bàkɔɔ̀kɔ	'snail'
ɔ̀klɔɔ̀klɔ	bàklɔɔ̀klɔ	'big brown squirrel'
ɔ̀mwɛmwɛ	bàmwɛmwɛ	'firefly'
ɔ̀sansà	bàsansà	'black kite'

iii. Which may have been borrowed:

ɔ̀kɔ̀tɔ̀kɔ	bàkɔ̀tɔ̀kɔ	'porcupine'
ɔ̀klàma	bàklàma	'dog'

odɛŋke	badɛŋke	'crocodile'
ɔ̀nàncwi	bànàncwi	'cow'

iv. or Which are Derived Agent Nouns (see pp. 135ff):

ɔdunè	badunè	'killer'
ɔŋwanè	baŋwanè	'cook'
ɔ̀tìnane	bàtìnane	'teacher'
ùdinè	bèdinè	'weaver'
ɔ̀kpàlane	bàkpàlane	'fetish priest'

There is a small number of other animate nouns in this noun class which don't seem to fit into any of the above sub-categories:

ɔkpɛ	bakpɛ	'grasscutter'
ɔ̀kànane	bàkànane	'leopard'
ɔ̀kpa	bàkpa	'ram'

Noun Class 1b., A/BA, contains the names of animals, in the widest sense, which are commonly found around the house and the names of some big game animals as well:

ebuo	bebuɔ	'animal'
àasɛ̀	bàasɛ̀	'bird'
èse	bèse	'goat'

àna	bàna	'scorpion'
àkɔɔ̀kɔ	bàkɔɔ̀kɔ	'chicken'
àlɛ̀lɛ̀	bàlɛ̀lɛ̀	'midge ant'
àklɔ̀ma	bàklɔ̀ma	'black-shouldered kite; lizard buzzard'
akuŋgɔ	bakuŋgɔ	'worm'
àyìkpɛ	bàyìkpɛ	'mouse'
alɔlɔ	balɔlɔ	'fly'
àbɔ̀tɔ	bàbɔ̀tɔ	'bush-pig'
atu	batu	'elephant'
etu	betu	'flying termite'

This class also includes a couple of words, most likely borrowed, which refer to humans:

àasì	bàasì	'wife's mother'
àsantinè	bàsantinè	'slave'

Noun Class II, O/LE, generally, but far from invariably, refers tɔ artifacts and to dɔmesticated crops:

ɔ̀bɛ̀diɛ̀	lɛ̀bɛ̀diɛ̀	'plantain'
ɔ̀kɛɛ̀	lɛ̀kɛɛ̀	'cutlass'
ùlu	lìlu	'road'

ɔ̀fɛ̀	lɛ̀fɛ̀	'calabash'
ɔdɔ	lɛdɔ	'story'
ɔ̀nta	lɛ̀nta	'corn'
ɔkpanà	lɛkpanà	'okra'
ɔma	lɛma	'town'
upo	lipo	'palm-wine torch'
ɔ̀siì	lɛ̀siì	'gourd'
ɔtɔ	lɛtɔ	'house'

It also contains a few body parts:

ɔ̀gbà	lɛ̀gbà	'foot/leg'
ɔka	lɛka	'tail'
ɔkwɛ	lɛkwɛ	'throat'
ɔ̀lɛ̀	lɛ̀lɛ̀	'sore, wound'
ɔ̀lɔna	lɛ̀lɔna	'skin'
ùtù	lìtù	'heart'

Noun Class III, LE/BA, contains:

i. The names of various tribes:

lɛ̀lɛ̀mi	bàlɛ̀mi	'Lɛ̀lɛ̀mi'
lɛ̀fana	bàfana	'Lɛ̀fana'
lɛlɛ	balɛ	'Santrokɔfi'

lìkpɛ̀lɛ	bàkpɛ̀lɛ	'Likpe'
lifu	befu	'Akpafu-Lolobi'

ii. The names of most birds and bats:

lɛbɔbɔ̀	babɔbɔ̀	'speckled pigeon'
lìgbwini	bègbwini	'hooded vulture'
lɛ̀jina	bàjina	'fox-faced bat'
lìkùkù	bèkùkù	'owl'
lɛ̀kpafɛ	bàkpafɛ	'"swallow"'
lɛ̀màŋgbɛ	bàmàŋgbɛ	'laughing dove'
lɛpa	bapa	'fruit bat'

In addition, one informant has given me:

lìkuùbi	bèkuùbi	'worm'

Noun Class IV, LE/A, contains nouns referring to:

i. Some kitchen utensils:

lɛ̀cami	àcami	'plate'
libwi	ebwi	'pot'
libokù	ebokù	'chair'

ii. Most body parts:

lɛnimì	animì	'eye'
lɛ̀nyi	ànyi	'tooth'

lɛ̀nyì	ànyì	'breast'
lɛ̀fwìɔ	àfwìɔ	'fingernail'
lìsè	èsè	'horn'

iii. Natural events and objects:

limeì	emeì	'day'
lɛkwa	akwa	'year'
lìtù	ètù	'ant hill'
lɛku	aku	'forest'
lɛ̀tabi	àtabi	'stone'
lìfù	èfù	'abandoned farm'

iv. A wide variety of other things:

liku	eku	'clan, family'
likpo	ekpo	'place, site, knot'
lɛ̀gbà	àgbà	'proverb'.
lɛla	ala	'thing'
lìkukù	èkukù	'piece'
lɛnyi	anyi	'name'
lɛyabì	ayabì	'star'

Additionally, Noun Class IV is the noun class to which Derived Nouns of Suitability (see pp 142 ff) are assigned:

lɛ̀dìlà	àdìlà	'food'

lìɗìlà	èɗìlà	'needle'
lɛ̀talà	átalà	'mat'
lɛvalà	avalà	'egg'
lɛɗalà	adalà	'cutting tool'

Noun Class V, KA/BA, contains the names of animals that mostly live in the bush:

kaji	baji	'small brown monkey'
kanvɛrɛ̀	banvɛrɛ̀	'adult palm tree beetle'
kapɛ	bapɛ	'duika'
kesi	besi	'rat'
kani	bani	'porcupine'
keyu	beyu	'monkey'

Noun Class VI, KA/KO, contains a miscellany of things and, historically, may have been the class to which diminutives were assigned.

kàbɛɛ̀	kɔ̀bɛɛ̀	'twig'
kàbwa	kɔ̀bwa	'hat'
kabulì	kɔbulì	'vine; moon, month'

kadruì	kɔdruì	'compound'
kajɛ	kɔjɛ	'basket'
kama	kɔma	'back'
kàwɛ	kɔ̀wɛ	'mortar'

There is an interesting relationship between Noun Class V and Noun Class VI in that certain animate nouns with a KA- prefix in the singular can take either a BA- prefix or a KO- prefix in the plural. As far as I can tell, this occurs only with the word for 'fish' and with the names of certain reptiles and insects:

kàbɛ̀	kɔ̀bɛ̀/ bàbɛ̀	'fish'
kàjɛ̀jɛɛ̀	kɔ̀jɛ̀jɛɛ̀/ bàjɛ̀jɛɛ̀	'nocturnal moth'
kàpàtiyalɛ̀	kɔ̀pɔ̀tiyalɛ̀ bàpàtiyalɛ̀	'lizard'
kàtàmùkpà	kɔ̀tàmùkpà bàtàmùkpà	'scorpion'
kɛ̀jàŋgbɛ	kɔ̀jàŋgbɛ bàjàŋgbɛ	'tortoise' '

I have been unable to determine if this alternation is dialectal or idiolectal.

Noun Class VII, KO/BA, contains only the names of a few animates:

kofonù	bafonù	'sheep'
kɔ̀làkpi	bàlàkpi	'snake'
kɔ̀pɔɔ̀	bàpɔɔ̀	'lizard'

Noun Class VIII, KO/A, contains the names of:

i. Some natural objects:

kɔbi	abi	'mountain'
kubo	ebo	'palm tree'
kufi	efi	'bush path'
kuji	eji	'tree'

ii. Some body parts:

kuli	eli	'head'
kɔ̀vwi	àvwi	'wing'
kɔ̀nu	ènu	'hand'

Noun Class IX, KA/N, contains only about half a dozen miscellaneous items:

kabɔ	mbo	'medicine'
kemo	mmo	'farm'

Noun Class X, ∅/BA, contains onomatopoeic or borrowed names for animates:

gbɔkpɔ	bàgbɔkpɔ	'duck'
wɛwɛ	bàwɛwɛ	'dog'
kɔ̀ꜛkɔ̀liɔ̀kɔ̀	bàkɔ̀kɔ̀liɔ̀kɔ	'rooster'

Noun Class XI, N-, contains a number of non-count, mass nouns, including many referring to liquids:

ŋ̀kpa	'life'
mla	'law'
mma	'salt'
nnɔ	'oil'
m̀pàtàhi	'trouble'
ntɛ	'liquid; palm wine'
ntɔ	'ashes'
ntu	'water'
ǹtubwa	'sandflies' (!)

Most of the members of Noun Classes XII through XVI are non-count nouns; that is, they cannot generally be followed by a number. Some of these non-count nouns are:

Noun Class XII, A- :

aba	'mud'
ɛ̀fi	'mud'
animì	'rice'
ànta	'corn'

Noun Class XIII, O- :

ùbɔ̀ja	'blood'
ùfi	'lime'
ùw⊃	'honey'

Noun Class XIV, LE- :

lɛna	'meat'
lìsùo	'sweat'
lɛ̀mwi	'fat'

Noun Class XV; KA- :

kana	'porridge'
kamu	'rice'
kɛ̀tì	'thatch'
kat⊃	'roof, Heaven, above'

Noun Class XVI, KO- :

kutu	'soup'
kɔ̀mìnìwì	'sand'

It should be noted, however, that not all members of Noun Classes XII-XVI are non-count: some members, for example, of Noun Class XIV, LE-, can take a number after them:

lilu líŋwí	'one yam'
lilu ɛ́tɛ́	'three yams'
lɛ̀ŋwa líŋwí	'one grey hair'
lɛ̀ŋwa ɛ́tɛ́	'three grey hairs'
lɛlɔ líŋwí	'one body'
lɛlɔ ɛ́tɛ́	'three bodies'

and so can Derived Nouns of Place (see pp. 155 ff), which are members of Noun Class XV, KA- :

kadikɔ̀ kúŋwí	'one kingdom'
kadikɔ̀ ɛ́tɛ́	'three kingdoms'
kaŋwakɔ̀ kúŋwí	'one kitchen'
kaŋwakɔ̀ ɛ́tɛ́	'three kitchens'
kàŋwàkɔ̀ kúŋwí	'one harvest place'
kàŋwàkɔ̀ ɛ́tɛ́	'three harvest places'

In addition, one or two informants had plural forms for some words which are invariable for other informants; this was primarily the case for nouns in Noun Class XIII, O-, which had plurals formed by analogy with Noun Class II, O/LE :

ɔfɛ	(lɛfɛ)	'sun'
ɔ̀ja	(lɛ̀ja)	'fire'

and much less so for nouns in Noun Class XV, KA-, which had plurals formed by analogy with Noun Class VI, KA/KO :

kadikɔ̀	(kɔdikɔ̀)	'kingdom'
kaŋwakɔ̀	(kɔŋwakɔ̀)	'kitchen'
kasɔ	(kɔsɔ)	'thinness'.

Noun Class XVII, Ø, consists of:

i. unassimilated loan words, mostly borrowed from Twi:

abrubɛ	'pineapple'
akutu	'orange'
àpintìma	'small drum'
sìka	'money'

jàdi	(from Ewe)	'kitchen'	
lɔrì	(from English)	'truck, lorry'	

ii. proper names, including the names of people, countries, and towns:

kòfi		'Kofi'	(boy's name)
amà		'Ama'	(girl's name)
atà		'Attah'	('Twin')
mɛnsà		'Mensah'	('Third-Born')
kwàsi		'Kwasi'	(boy's name)
ɡanà		'Ghana'	
àmɛrìkà		'America'	
àblɔ̀ci	(from Ewe)	'overseas, esp. England'	
lɛɡɔlɔ̀		'Baglo'	(town)
hɔ́		'Ho'	(town)
ŋ̀kraà		'Accra'	(city)
kùmasì		'Kumasi'	(city)

The names of the residents of a particular area form a subcategory of this second class of the members of Noun Class XVII; this names are formed by suffixing the Akan formative --fo '-(i)an, -er' to the name of the town or country:

ganafo	'Ghanaian(s)'
àmɛrikafo	'American(s)'
hɔhoifo	'Hohoe people'
lɛgɔlofo	'Baglo people'
twifo	'Twi speaker(s)'

Noun Class XVIII, BO-, consists solely of infinitives, which are discussed on pp 224ff.

bɔŋwa	'cooking'
bɔ̀ŋwà	'harvesting'
bùmwì	'praising'
budiè	'removing'

Co-occurrence restrictions on prefixes. Normally, a noun stem can belong to only one noun class, e.g., the noun stem -nànà 'man' is found only with the prefixes from Noun Class Ia., O/BA, to form ɔ̀nànà, bànànà 'man, men', and never, say, with the prefixes from Noun Class VI, KA/KO: *kànànà, *kɔ̀nànà . Some noun stems, however, are found with the prefixes from more than one class, though with a somewhat different meaning with each different set of prefixes; thus there is the triplet

ntu (Cl. XI) ~ kɛtu (Cl. XV) ~ kutu (Cl. XVI)
'water' 'river' 'soup'

all of which have the central meaning of 'something to do with water.' In Bantu languages, this type of morphological/semantic development is quite widespread; (cf. Heny, 1972); in Buɛm, however, this behavior is no longer productive and is restricted primarily to the formation of abstracts:

ɔ̀ŋwa, bà- (Cl. Ia) ~ kɔ̀ŋwa (Cl. XVI)
'sib' 'relationship'
ɔti, ba- (Cl. Ia) ~ kɔti (Cl. XVI)
'father' 'paternity'

and even then it is largely restricted to forming doublets with infinitives:

bɔŋwa (Cl. XVIII) ~ lɛŋwa (Cl. XIV)
'cooking' 'way of cooking'
butɛmi (Cl. XVIII) ~ litɛmi (Cl. XIV)
'speaking' 'way of speaking; language'
buye (Cl. XVIII) ~ kuyee (Cl. XVI)
'trading' 'trade'

For further comment, see my discussion of derived nouns, pp. 157ff.

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Noun Suffixes

The two Noun Suffixes in Buɛm are -fo 'resident of ...' and -BI 'young, immature'.

P9 NSuff -----) (-fo) (-BI)

As mentioned on page 114, -fo can be suffixed to a place name to denote an inhabitant of that place:

ganafo	'Ghanaian(s)'
hɔhoifo	'Hohɔe people'
kutɛfo	'Kute people'
twifo	'Twi speaker(s)'

-BI can be suffixed to a noun (almost always an animate noun) to refer to a young or immature specimen; it has the same tone as the syllable preceding it.

T2 SD: X + C V + -BI ±

SC: X + C V + -bi ±

[αLoTo] [αLoTo]

ɔ̀nàbì	bà-	'boy(s)'
ɔ̀lòkubi′	bè-	'girl(s)'
ɔ̀klàmabi	bà-	'puppy'
jàtabi	bà-	'lion cub'

àasɛ̀bì bà-	'baby bird'
Yaobi	'little Yao'
ganafobi	'little Ghanaian(s)'

-BI is also used with one or two inanimate nouns to denote unfinished products:

ɔ̀ntabi	'unprocessed corn'

or young residents:

skubi	'school-children'
ganabi	'young Ghanaian(s)'

-BI is presumably the stem for the noun ubi, be- 'child'.

There is one slight problem with respect to noun suffixes, for parallel to the noun lɛ̀tabi, à- 'stone' is the noun lɛ̀takpa, à- 'mountain', where -kpa is presumably some sort of augmentive; as far as I can tell, however, -kpa is not paired with -BI elsewhere, and there is no noun *lɛ̀ta ?'boulder'. Höftmann (1965) did tentatively identify -kpa as a formative; however, some of her examples were obvious borrowings from Ewe. At present, it seems that the -kpa of lɛ̀takpa, à- is on a par with the "cran-" of "cranberry."

Concord and Agreement

Robins (1964:249) defines concord and agreement "as the requirement that the forms of two or more words of specific word classes that stand in specific syntactic relationship with one another shall also be characterized by the same paradigmatically marked category (or categories)." In Buɛm, the categories that determine syntactic concord and agreement are number and the form of the Noun Class prefix to the Noun, thereby satisfying Winston's "strong" definition of a noun class language (Winston, 1962). In this grammar, I use the term "concord" to refer to the relationship which occurs in endocentric constructions, i.e., to the relationship between a Noun and certain of its modifiers, and the term "agreement" to refer to the relationship which occurs in exocentric constructions, i.e., between a Noun and pronouns referring to that Noun and between the subject of a verb and most finite forms of the verb.

There is syntactic concord between a Noun and the following parts of speech which modify that Noun:

i. Participles,
ii. Ordinal numbers and cardinal number úŋwí '1',
iii. Determiners, and
iv. Relative Pronouns.

Concord takes the following forms:

i. If the Noun is in the singular and belongs to any of Noun Classes Ia, Ib, II, X, or XVII, or if it is non-count and belongs to Noun Class XIII (i.e., if the Noun is prefixed by O- , by "animate" A- , or by "singular" Ø-), then the concordial prefix is O- :

ɔ̀nànà ɔ́mɛ̀	'this man'
atu ɔ́mɛ̀	'this elephant'
ɔtɔ ɔ́mɛ̀	'this house'
akutu ɔ́mɛ̀	'this orange'
ùwo ɔ́mɛ̀	'this honey'

ii. If the Noun is in the plural and belongs to any of Noun Classes Ia, Ib, III, V, VII, X, or XVII or if it is non-count and belongs to Noun Class XVII (i.e., if the Noun is prefixed by BA- or "non-singular" Ø-), then the concordial prefix is BA- :

bànànà bámɛ̀	'these men'
batu bámɛ̀	'these elephants'
bàlɛ̀mì bámɛ̀	'these Lɛlɛmi'
baji bámɛ̀	'these small monkeys'
bafonù bámɛ̀	'these sheep'
bàwɛwɛ bámɛ̀	'these dogs'
twifɔ̀ bámɛ̀	'these Twi-speakers'

iii. If the Noun is in the plural and belongs to either Noun Class IV or Noun Class VIII or if it is non-count and belongs to Noun Class XII (i.e., if the Noun is prefixed by "inanimate" A-), then the concordial prefix is A- :

èbwì ámɛ̀	'these pots'
adi ámɛ̀	'these cloths'
animì ámɛ̀	'this rice'

iv. If the Noun is in the plural and belongs to Noun Class IX or if it belongs to either Noun Class XI or Noun Class XVIII (i.e., if the Noun is prefixed by either N- or BO-´), then the concordial prefix is BO- :

mmɔ bɔ́mɛ̀	'these farms'

ntʊ bɔ́mὲ	'this water'
bɔdʊ bɔ́mὲ	'this killing'

v. All Nouns prefixed with LE- have concordial forms in LE- , regardless of number or Noun Class:

lɛtɔ lέmὲ	'these houses'
lìbwì lέmὲ	'this pot'
lὲlὲmi lέmὲ	'this Lɛlɛmi'
lìlù lέmὲ	'this yam, these yams'

vi. All Nouns prefixed with KA- have concordial forms in KA- , regardless of number or Noun Class:

kaji kámὲ	'this small monkey'
kàbwa kámὲ	'this hat'
kemo kámὲ	'this farm'
kamu kámὲ	'this rice'

vii. All Nouns prefixed with KO- have concordial forms in KO- , regardless of number or Noun Class:

kɔ̀bwa kɔ́mὲ	'these hats'
kɔdi kɔ́mὲ	'this cloth'
kofonù kɔ́mὲ	'this sheep'
kutu kɔ́mὲ	'this soup'

These concordial forms are tabulated in Figure X

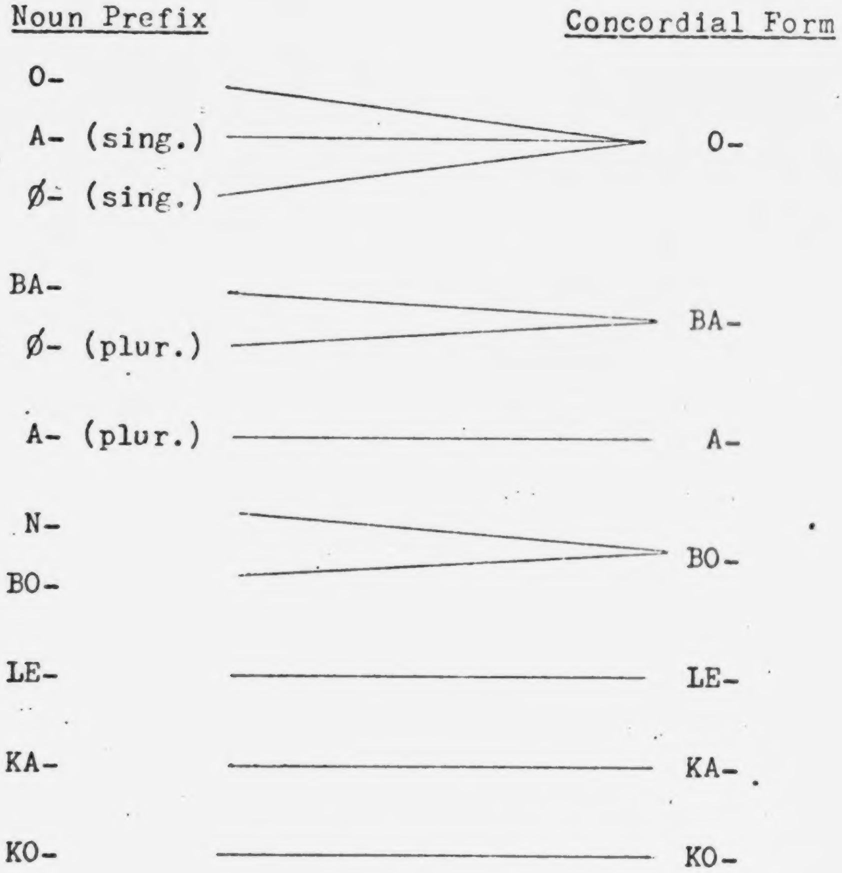

Figure X

Noun Concordial Forms

and are introduced transformationally by agreement rules (cf. Chomsky, 1965:175) which operate on the "Conc" segment of Phrase-structure rules like the one for Relative Pronouns (see page 201),

P27 RelP -------) Conc + -ni

The agreement rule for Buɛm is:

$$\text{T3} \quad \text{Conc} \;\text{==)}\; \begin{bmatrix} \text{O-} \\ \\ \text{BA-} \\ \\ \text{A-} \\ \text{BO-} \\ \text{LE-} \\ \text{KA-} \\ \text{KO-} \end{bmatrix} \Big/ \begin{bmatrix} [+\text{N}, \{\text{Ia, Ib, II, X, XIII,} \\ \quad \text{XVII}\} \ +\text{Sing}] \\ [+\text{N}, \{\text{Ia, Ib, III, V, VII,} \\ \quad \text{X, XVII}\} \ -\text{Sing}] \\ [+\text{N}, \{\text{IV, VIII, XII}\} \ -\text{Sing}] \\ [+\text{N}, \{\text{IX, XI, XVIII}\} \ -\text{Sing}] \\ [+\text{N}, \ \text{LE} \ \_\_\_] \\ [+\text{N}, \ \text{KA} \ \_\_\_] \\ [+\text{N}, \ \text{KO} \ \_\_\_] \end{bmatrix} + \text{Y} + \underline{\text{Conc}}$$

where Y = intervening modifiers of N

I discuss agreement on pp. 213-222 and pp. 238ff.

Compound Nouns

A compound noun results from the fusion of one noun either with another noun or, less frequently, with a verb stem. While there are a great many compound nouns currently in use, it seems that the process of compounding is no longer productive; it is this lack of productivity that separates compound nouns from derived nouns.

Noun + Noun combinations. Historically, it seems that this type of compound noun was formed from the fusion of the singular or non-count forms of the two nouns involved--parallel to the English compounds 'bookend', 'busstop', etc.--rather than from the fusion of plural forms, *booksend', *'busesstop', and that the first of the two nouns was structurally a possessor of the second. The following rule schematizes the most common method of fusion:

2

1 2 3 4

SD: ± NC + NSt ± ± NC + NSt ±

SC: ± 3 + 2 + 4 ± / 3 = CV-

Restated, if the (singular or non-count) Noun Class prefix of the second noun consists of a consonant followed by a vowel, then the Noun Class prefix of the first noun is deleted and the Noun Class prefix of the second noun takes its place.

èse	+	leyu	====)	lìseyu	'goat sty'
'goat'		'shed'			
kofɔnù	+	leyu	====)	lɛfonùyu	'sheep sty'
'sheep'		'shed'			
ɔ̀gà	+	libɔkù	====)	lɛ̀gàbɔkù	'throne'
'chief'		'stool'			
ɔ̀gà	+	kàbwa	====)	kàgàbwa	'crown'
'chief'		'hat'			
ɔ̀nta	±	kana	====)	kàntana	'corn gruel'
'corn'		'gruel'			
umɔ	+	kabulì	====)	kemɔbulì	'(cotton) thread'
'cotton'		'thread'			
ùfo	+	lìbò	====)	lìfobò	'ball of fufu'
'fufu'		'ball'			

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kɛtu + kùdɔ̀ ====) kutudɔ̀ 'river bank'
'river' 'side'
kamu + lɛ̀tɔ̀ ====) lɛmutɔ̀ 'pile of
'rice' 'heap' husked rice'
àkàtùa + kutu ====) kɔ̀kàtùatu 'groundnut soup'
'peanuts' 'soup'
kuli + kama ====) kɛlíma 'back of head'
'head' 'back'
ɔtɔ + kama ====) katɔ̍ma 'inner room'
'house' 'back'

If, however, the prefix to the second noun does not have a CV- structure and the prefix to the first noun does, then the prefix to the second noun is deleted and the prefix to the first noun serves as the prefix to the entire compound word, usually:

```
         1      2        3      4
SD:  ±  NC  +  NSt  ± ±  NC  +  NSt  ±
SC:  ±  1   +  2    ±    4   ±  /  3 ≠ CV- & 1 = CV-
```

kùbo + nnɔmì ====) kùbonɔmì 'palm pomade'
'palm' 'oil'
katɔ + ɔ̀siì ====) katɔsiì 'hanging gourd'
'above' 'gourd'

kɔ̀nɔ̀ + ɔ̀siì ====) kɔ̀nɔ̀siì 'bladder'
'urine' 'gourd'

kalɔ + udilà ====) kalɔdilà 'kind of poisonous snake'
'ground' 'needle'

If neither of the prefixes is of CV- structure, then the prefix A- is used if the compound noun yields the name of a bird:

ùkpine + àasɛ̀ ====) ùkpinesɛ̀ '"omen of death" bird'
'dead man' 'bird'

ntu + àasɛ̀ ====) etusɛ̀ 'cattle egret'
'water' 'bird'

In one other example I have, the prefix KA- is used:

àsì + ɔtɔ ====) kàsìntɔ 'hearthside'
'hearth' 'house'

There are some exceptions to these rules; these exceptions are primarily the names of various food items or parts of food items:

kalɔ + lɛbɛ ====) ɔ̀lɔbɛ̀ 'cocoayam'
'ground' 'kernel'

kalɔ + ùjutu ====) ɔlɔ'jutu 'cassava'
'ground' 'root'
lɛ̀bɛ + nnɔmì ====) àbɛnɔmì 'kernel oil'
'kernel' 'oil'

Noun + Verb combinations. Generally, when a compound noun is formed from a noun stem plus verb stem, the noun stem precedes the verb stem, and the compound noun is prefixed by LE- :

SD: ± NC + NSt + VSt ±
SC: ± LE- + NSt + VSt ±

lɛlɔ + -ŋwa ====) lɛlɔŋwa 'sweat'
'body' 'cook'
kama + -kpɛ̀ ====) lɛmaŋkpɛ̀ 'lateness'
'back' 'delay'
kɔ̀nu + -ja ====) linunja 'thanks'
'hand' 'clap'
kenye + -yɔ ====) linyeyɔ 'temptation'
'mouth' 'waht'
àbi + -bo ====) lɛ̀bibo 'suffering'
'pain' 'have'

lɛkpa	+	-lie	====)	lɛkpalie	'turn at duty'
'custom'		'sit'			
lìkpò	+	-se	====)	lìkpòse	'mark; brand'
'place'		'run'			

There are two nouns, however, both compounded with ala 'things', which are not prefixed by LE- :

àlà	+	-bla	====)	kàlàbla	'work'
'thing'		'work, do'			
àlà	+	-kpi	====)	kɔ̀làkpi	'snake'
'thing'		'die'			

Considerably less common is the arrangement VSt + NSt ; most of the compound nouns I have collected under this rubric are the names of plants or animals:

-dù	+	lili	====)	kàdùlili	'yellow seed which causes headaches'
'hurt'		'head'			
-ti	+	lìbì	====)	kɛtilìbì	'dung-beetle'
'take'		'dung'			
-dɔ	+	lɛ̀tabi	====)	lɛdɔntabi	'whetstone'
'sharpen'		'stone'			

-fã + katɔ ====) ɔfanatɔ 'plantain'
'hang' 'ábove'

As we see, in most cases, the original noun still retains its prefix; I suspect that these compound nouns entered the languages well before the others.

Other combinations. I have found one example of a compound noun formed from the sequence NSt + VSt + NSt :

kalɔ + -̀dũ + ebuo ====) alɔdumbuo 'bedbug found in
'ground' 'bite' 'animal' swish houses'

and one example of a compound noun formed from a verb stem followed by a tense marker followed by a verb stem:

-di + TAA- + -bu ====) kaditeebu 'left-over
'eat' HABit 'remain' food'

There are also a couple of examples of compound nouns formed from the sequence VSt + VSt , where the first verb is bɔnu 'to see':

-nu + -sìà ====) lɛnuǹsìa 'remembrance'
'see' 'follɔw'
-nu + -jìè ====) lɛnuǹjìɛ̀ 'jealɔusy'
'see' 'follow'

Syntactic notes. While most compound nouns are invariable, some compound nouns do, in fact, have separate singular and plural forms:

etusɛ̀	be-	'cattle egret'
litubìɔ̀	e-	'water well'
katɔsiì	kɔ-	'hanging gourd'
ùbɛ̀ji	lì-	'royal palm'
kuvɔdɔ̀	e-	'latrine'

These plural forms are presumably formed by analogy with the plural forms for simple nouns and support my claim that the original elements of the compound nouns were the singular, rather than the plural, forms of the nouns involved: if the plural forms were involved, then the expected plural form, according to my formulation on page 127, for katɔsiì 'hanging gourd' would be *lɛtɔsiì since the plural form for ɔ̀siì 'gourd' is lɛ̀siì . It should be noted, however, that the fact that a particular compound noun may be invariable is independent of whether that compound is a count or a non-count noun:

kàgàbwa kéŋwí	'one crown'
kàgàbwa ínyɔ́	'two crowns'

The information as to whether a particular compound noun is variable or invariable would be stored in the Complex Symbol for the noun--since compound nouns (with the exception of those formed NC + VSt + VSt) function syntactically like simple nouns, the complex symbols would be like those for simple nouns in other respects too:

li.tubìɔ̀	e-	[IV__, -Animate, +Count]	'water well'
kà.gàbwa		[XV__, -Animate, +Count]	'crown'
kà.ntana		[XV__, -Count, -Abstract]	'corn gruel'
lɛ.lɔŋwa		[XIV__, -Count, -Abstract]	'sweat'
ka.tɔɔ̀njà		[XV__, +Abstract]	'kin marriage'
li.semi		[XIV__, -Count, -Abstract]	'Teteman'
e.tusɛ̀	be-	[Ib__, +Animate]	'cattle egret'

There are special problems involved, however, with compound nouns formed NC + VSt + VSt since these--or at least the two I have--still have considerable verbal properties in addition to their properties as nouns; these problems are substantially identical to those pertaining to derived nouns and will be discussed there.

Derived Nouns

There are three types of derived noun which are produced by fully productive processes:

i. Derived Agent Nouns (N_{Agent}),
ii. Derived Nouns of Suitability (N_{Suit}), and
iii. Derived Nouns of Place (N_{Place}).

$$\text{P10} \quad N_{Der} \text{ --------) } \begin{Bmatrix} N_{Agent} \\ N_{Suit} \\ N_{Place} \end{Bmatrix}$$

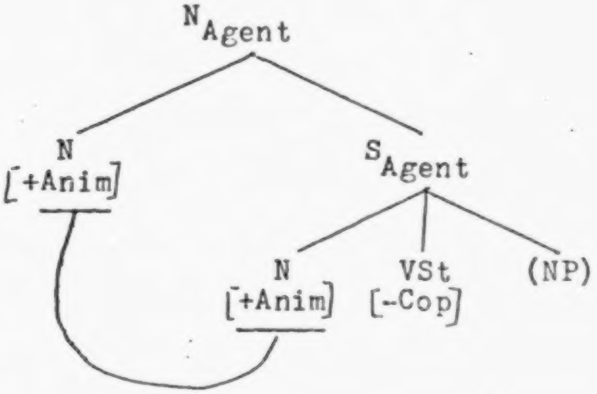
These nouns are called "derived nouns" because they reflect the relationship between a "dummy" noun in an underlying sentence and the verb of that underlying sentence; the underlying noun + verb is converted into a single surface noun transformationally, and the order of any other Noun Phrases that were in the original underlying sentence is also altered transformationally.

Derived Agent Nouns. Derived Agent Nouns presumably have their origin in structures in which the "dummy" noun, which is necessarily animate, is the subject of the verb of an underlying relative clause; the verb is a non-copular and may or may not have a single object:

P11 N_{Agent} --------) [+N, +Animate] + S_{Agent}

P12 S_{Agent} --------) [+N, +Animate] + $\underset{[-Cop]}{VSt}$ (NP)

This would result in a tree diagram like:



An alternate notation for the tree diagram is

$$\underline{\text{someone}}\ \left[_S\ \underline{\text{someone}} + \underset{[-Cop]}{VSt}\ (NP)\right]_S\ ;$$

in further discussion, I shall use the linear notation

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instead of tree diagrams.

The following phrases will exemplify the underlying forms of Derived Agent Nouns:

someone $[_S$ someone + -tinà + àlà$]_S$
'teach' 'things'

someone $[_S$ someone + -ŋwà + kamu$]_S$
'harvest' 'rice'

someone $[_S$ someone + -ŋwà$]_S$
'harvest'

someone $[_S$ someone + -kpì$]_S$
'die'

The deep structure to these phrases is then altered as follows: the "someone"s are deleted, being replaced by prefixing the Verb Stem with the Noun Class markers for Noun Class Ia (i.e., with the prefix pair O/BA) and by suffixing the Verb Stem with -NE . In addition, if the verb in the original embedded sentence had an object, that object is transposed to appear before the new noun formed from the Verb Stem.

T4 SD: $\underline{\text{someone}}\ \left[_S\ \underline{\text{someone}} + \text{VSt}\ (\text{NP})\right]_S$

SC: (NP) ± Ia + VSt + -NE ±

Applying this transformation to the examples on the preceding page, we get:

àlà	0/BA-tinà-NE	'teacher(s)'
kamu	0/BA-ŋwà-NE	'rice harvester(s)'
	0/BA-ŋwà-NE	'harvester(s)'
	0/BA-kpì-NE	'corpse(s)'

A morphophonemic rule then applies to give the new noun the appropriate vowel harmony and tonal patterns: the Noun Class prefix (but not the suffix) harmonizes with the Verb Stem. The prefix is on a Low tone. If the Verb Stem is monosyllabic, then it is on a Mid tone; if it is polysyllabic, then the first syllable is on a Low tone, and subsequent syllables are on Mid tones. The suffix has a Mid or Low tone opposite to the inherent tone of the final syllable of the Verb Stem.

$$\begin{array}{lllllllll}
\text{T5} & \text{SD:} & \pm & \text{Ia} & + & \text{VSt} & + & \text{-NE} & \pm \\
 & & & & & \left(\left[+\text{Syll}\right]\right)\begin{bmatrix}+\text{Syll}\\ \alpha\text{LoTo}\end{bmatrix} & & & \\
 & \text{SC:} & \pm & \text{Ia} & + & \text{VSt} & + & \text{-ne} & \pm \\
 & & & \begin{bmatrix}\beta\text{Adv}\\ +\text{LoTo}\end{bmatrix} & & \begin{matrix}\left[\beta\text{Adv}\right]\\ \left(\begin{bmatrix}+\text{Syll}\\ +\text{LoTo}\end{bmatrix}\right)\begin{bmatrix}+\text{Syll}\\ -\text{LoTo}\end{bmatrix}\end{matrix} & & \begin{bmatrix}-\text{Adv}\\ -\alpha\text{LoTo}\end{bmatrix} &
\end{array}$$

The final, surface forms for the structures on page 137 are, therefore:

àlà ɔ̀tìnane,	àlà bàtìnane	'teacher(s)'
kamu ɔ̀ŋwane,	kamu bàŋwane	'rice harvester(s)'
ɔ̀ŋwane,	bàŋwane	'harvester(s)'
ùkpine,	bèkpine	'corpse(s)'

Other examples of Derived Agent Nouns are:

bɔŋwa 'to cook'	======)	ɔ̀ŋwanè,	bà-	'cook(s)'
bùsèlà 'to travel'	======)	ùsèlane,	bè-	'traveller(s)'
bɔfɔ 'to receive'	======)	ɔ̀fɔnè,	bà-	'recipient(s)'
bɔ̀fɔ̀ 'to wash'	======)	ɔ̀fɔne,	bà-	'washer(s)'

bɔnu ======) ɔ̀nunè, bà- 'spectator(s)'
'to see'
bunu ======) ùnunè, bè- 'listener(s)'
'to hear'
bùfwì ======) ùfwine, bè- 'invalid(s)'
'to be sick'
bufwi ======) ùfwinè, bè- 'Bronx cheerér(s)'
'to give a Bronx cheer'
bɔ̀sì ======) ɔ̀sine, bà- 'emigrant(s)'
'to come from'
bɔ̀dù ======) ɔ̀dune, bà- 'killer(s)'
'to kill'
bɔ̀kpàlà ======) ɔ̀kpàlane, bà- 'worshipper(s)'
'to worship'

Derived Agent Nouns are used in much the same way as other animate nouns and occur in sentences like:

1. baalɔ mùnà ɔ̀ŋwanè ~~George~~ Jerry.
   3p+PRES+call my cook George
   'My cook's name is George.'
2. Kɔtɔka bèkìsine bádù ŋ̀.
   Kotoka haters 3p+PAS+kill him
   'The people who hated Kotoka killed him.' or

'Kotoka's enemies killed him.'

3. kemo bèsene bààyɔ ɔ̀nantu.
farm goers 3p+PRES+like rain
'Farmers like rain.'

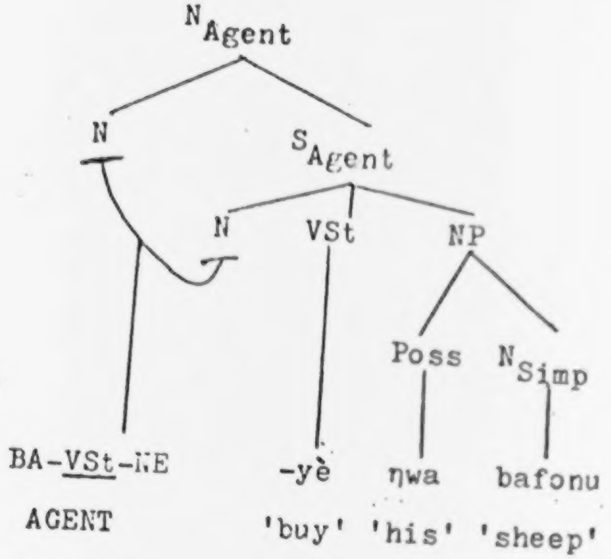
4. franƙobi bebɛŋwùnì àlà bàtìnane.
Franco+young 3p+COME+become things teachers.
'Franco students are going to become teachers.'

5. ŋwa lìgulabi ùyune úkpì kàmàdì.
his money thief 3s+PAS+die yesterday.
'The thief of his money died yesterday.'

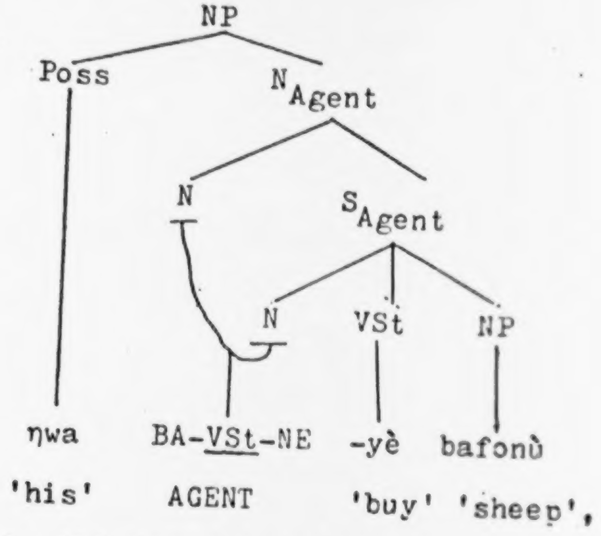
6. mùnà adi ɔ̀fɔne ɔ̀ca ɔ̀ma ŋ kemo.
my clothes washer 3s+PRES+is-at town ∅ inside.
'The man who washes my clothes lives in town.'

7. Mɛnsà ɔ́nù ŋwa bafonù bèyene lɛ̀dìjɛ̀.
Mensah 3s+PAS+see his sheep buyers in+the+morning.'
'Mensah saw the buyers of his sheep this morning' or
'Mensah saw his sheep-buyers this morning.'

(Sentences like 7 are inherently ambiguous because the surface structure of ŋwa bafonù bèyene gives no indication as to whether the underlying structure is



, which would be the deep structure underlying the first interpretation, or whether it is



, which would be the deep structure underlying the second interpretation. This ambiguity is common to all derived nouns.

Derived Nouns of Suitability. Since the term "Derived Noun of Suitability" is my own coinage, I shall preface my discussion of what a "Derived Noun of Suitability" is syntactically with a discussion of what it is semantically. It seems that there are three basic ways in which a language can order derived nouns which express the notions of the (animate) Agent of an action, the (inanimate) Recipient of an action, and the (inanimate) Instrument of an action:

i. A language can use separate forms for each of the three relationships, thus presumably indicating that all three relationships are about equally dissimilar, with no two relationships having more in common with each other than either has with the third. This type of linguistic behavior is found in Akan, Ewe, Nkonya, and Likpe, for example:

(Ewe)	nuḍula	'someone who eats'
	nuḍunu	'something to eat with'
	nuḍuḍu	'something to eat'

ii. The same forms can beeused to refer both to the

Agent of an action and to the Instrument used in performing the action, thus presumably indicating that the relationship of Agent and Instrument have more in common with each other than either of them has with the relationship of Object or Recipient. This arrangement is very common in English, where the -er suffix is used quite frequently to denote both the means and the man of an action indifferently: a "dish-washer" is either a man or a machine that washes dishes, a "riveter" is either a man or a machine that drives rivets, etc.

iii. The same forms can be used to refer to both the Object or Recipient of an action and to the Instrument of the action, presumably indicating that both the Object and the Intrument are similar in both being "things" used by an Agent. We find this pattern to a limited extent in American English, at least, for example, with words such as a "broiler", which refers either to a chicken which is suitable for broiling or to an oven, grill, etc. which can beuused for broiling, a "fryer", which is either a chicken suitable for frying or a pan for frying in, and so on. In Buɛm, all derived

Instruments and Objects (with the exception of participles used as substantives (see p. 150)) are formed in the same way and, significantly, with the noun stem -là 'thing'; I apply the term "Derived Nouns of Suitability" to derived nouns of this type.

Derived Nouns of Suitability presumably have their origin in structures in which the dummy noun is modified by a relative clause with a compound predicate containing the verb -ti 'use' with the dummy as its object followed by some other Verb Phrase (See pp. 385 ff for discussion of buti in serial verb constructions).

P13 N_{Suit} --------) $[+\text{N}, -\text{Animatd}, +\text{Count}] + S_{\text{Suit}}$

P14 S_{Suit} --------) $\text{INDEF} + \text{-ti} + \text{NP} + \text{VP}$

This gives us the formula:

$\underline{\text{something}}\ [_S\ \text{INDEF} + \text{-ti} + \underline{\text{something}},\ \text{VP}]_S$,

which can be exemplified by

something [$_S$ INDEF + -ti + *something*, -fɔ̀ adi]$_S$

'something used in washing clothes'

something [$_S$ INDEF + -ti + *something*, -fɔ̀]$_S$

'something used in washing'

something [$_S$ INDEF + -ti + *something*, -fi lilu]$_S$

'something used in roasting yam'

something [$_S$ INDEF + -ti + *something*, -fi]$_S$

'something used in roasting'

something [$_S$ INDEF + -ti + *something*, -di]$_S$

'something used in eating' ,

which are parallel to such straightforward relative clauses as:

omò [$_S$ INDEF + -ti + *omò*, -fɔ̀ adi]$_S$ ======)

omò ɔni bèèti bàafɔ̀ adi

OMO Rel 3p+PRES+use 3p+PRES+wash clothes

'OMO which is used in washing clothes'

adi [$_S$ INDEF + -ti + *adi*, -fɔ̀]$_S$ ======)

adi ani bèèti bàafɔ̀

clothes Rel 3p+PRES+use 3p+PRES+wash

'clothes which are being taken for washing'

etc. The deep structures to these phrases are then altered as follows: the "something"s are deleted, being replaced by prefixing the Verb Stem with the Noun Class markers for Noun Class IV (i.e., with the prefix pair LE/A) and by suffixing the Verb Stem with -là . If the verb in the original embedded sentence had an object, that object is transposed to appear before the new noun formed. Everything else is deleted.

T6 SD: something $\left[_S \right.$ INDEF + -ti + something, VSt (NP) $\left.\right]_S$

SC: (NP) ± IV + VSt + -là ±

Applying this transformation to the examples on the preceding page, we get:

adi LE/A-fɔ̀-là	'things to wash clothes wit
LE/A-fɔ̀-là	'things to be washed'
lilu LE/A-fi-là	'things to roast yam with'
LE/A-fi-là	'things to roast'
LE/A-di-là	'things to eat'

A morphophonemic rule then applies to cause the prefix to harmonize with the verb stem and to assign tone: the verb stem retains its inherent tone, which is also "copied" onto the prefix. (Since my corpus contains no examples of Derived Nouns of Suitability formed from polysyllabic verb stems in which the tone of the first syllable differs from that of any subsequent syllable, the tonal section of this rule may need future revision.)

$$\begin{array}{lllllllll}
\text{T7} & \text{SD:} & \pm & \text{IV} & + & \text{VSt} & + & \text{-l\`a} & \pm \\
 & \text{SC:} & \pm & \text{IV} & + & \text{VSt} & + & \text{-l\`a} & \pm \\
 & & & \begin{bmatrix}\alpha\text{Adv}\\ \beta\text{LoTo}\end{bmatrix} & & \begin{bmatrix}\alpha\text{Adv}\\ \beta\text{LoTo}\end{bmatrix} & & &
\end{array}$$

The final forms for the underlying phrases on p 146 are, therefore:

adi lɛ̀fɔ̀là,	adi àfɔ̀là	'thing(s) for washing clothes'
lɛ̀fɔ̀là,	àfɔ̀là	'thing(s) for the wash'
lilu lifilà,	lilu efilà	'thing(s) for roasting yam'
lifilà,	efilà	'thing(s) for roasting'
lɛdilà,	adilà	'thing(s) for eating; food'

Other examples are:

bɔ̀dà	======)	lɛ̀dàlà	àdàlà
'to wear'		'thing(s) to wear'	
bɔda	======)	lɛdalà	adalà
'to cut'		'thing(s) to cut things down with'	
bɔfɔ	======)	lɛfɔlà	afɔlà
'to receive'		'thing(s) received, contributions'	

bùfì ======) lìfìlà èfìlà

'to be sick' 'thing(s) which cause illness'

Because I have not encountered similar types of derived noun in other languages, I have cited below a fair number of sentences, which were quite freely elicited, to illustrate the different ways in which Derived Nouns of Suitability can be used:

8. bɔ̀du bɔ̀di lɛbɛlà libelì.
killing BO+is IV+be-hidden+thing big
'Murder is a great secret.'

9. Pàpa útì lìbìlà úbì kɛtubwì kɛnyi.
Papa 3s+PAS+use IV+cover+thing 3s+PAS+cover water+pot mouth
'Father used a lid to cover the mouth of the waterpot.'

10. Kòfi ɔ́dà uji kù lɛdalà
Kofi 3s+PAS+cut stick with IV+cut+thing
'Kofi cut the stick with a chopping tool (e.g., axe)

11. bɔ̀ɔdì àdìlà àbwinì.
1p+PRES+eat IV+eat+thing good
'We eat good food.'

12. lifilà lɛ́cùì nà ɔja kɛmo.

IV+roast+thing LE+PAS+be-burnt at fire inside

'The roast got burnt in the fire.'

13. ɔ̀nànà mùukìsi mi útì lìfìlà útè mi.

man REL+PRES+hate me 3s+PAS+take IV+be-sick+thing 3s+PAS+give me

'The man who hates me gave me something to make me sick.'

14. lɛ̀fɔ̀là lɛ́nvɔ̀ lɛ́lɛ̀ kàdwɛ́ɛ̀.

IV+wash+thing LE+that LE+clean well

'This soap cleans well.'

15. àfɔ̀là ánvɔ̀ aaŋwu piì.

IV+wash+thing A+that A+PRES+be-dirty a-lot

'Those things to be washed are quite dirty.'

16. kɔ̀munyɔ̀n kɔ̀di kɔyu lɛfɔlà.

communion KO+is soul IV+receive+thing

'Communion is something received by the soul.'

17. lítì nnɔmì lɛ́jì ajilà piì.

1s+PAS+use palm-oil 1s+PAS+fry IV+fry+things a-lot

'I used palm oil to fry many things suited to frying.'

18. kebi mmi kàdi lɛjalà líŋwí.
drum "small" KA+be IV+drum+thing one
'A "small drum" is one thing to drum on.'

19. kofonù kɔ̀dì bafwiɔ̀ lɛkpalà.
sheep KO+be fetish IV+sacrifice+thing
'A sheep is a sacrifice to an idol.'

20. ɔ̀pia ɔdi batı kùkù likpolà.
spear O+be fathers old IV+fight+thing
'The spear was our fore-fathers' weapon.'

21. lìkpidi lɛ̀di àtibrùku linilà.
evil LE+be God IV+reject+thing
'Sin is something loathesome to God.'

22. lítì lɛŋwalà lɛ́ŋwà kana.
1s+PAS+use IV+cook+thing 1s+PAS+cook gruel
'I used a cooking pan to cook gruel.'

23. líyè aŋwalà ànì ka lilu, animì, kù ɔ̀kpàna nà kuye.
1s+PAS+buy IV+cook+thing like yam, rice, and
okra at market
'I bought things to cook like yam, rice and
okra at the market.'

24. ǹtéŋwɛ̀nì ɔku ɔsìka mia ɛ̀ŋwɛ̀nìlà éyì.

1s+PAS+NEG+write letter because my IV+write+thing
A+PAS+get-lost

'I didn't write a letter because my writing
materials got lost.' or 'because my
thoughts to write down got lost.'

25. m̀ɔwìà lìtèlà fùà lɛ̀sìŋkɔ kudɔ.

1s+PRES+desire IV+give+thing your area side

'I want a gift from you.'

26. su mi litɛmilà líŋwí nà lìnu

IMP+tell me IV+speak+thing one REL 1s+SUBJ+hear

'Tell me one story that I should hear.'

27. mia lìtìlà líbùnù.

my IV+take+thing LE+PRES+be-heavy

'My luggage is heavy.'

28. lìyu ìye lɛtulà màmà lɛ́tu mi ɔ̀gbà.

thorn or IV+pierce+thing other LE+PAS+pierce me foot

'Either a thorn or some other piercing thing
pierced my foot.'

29. dɔ̀kɔ̀ avalà ébò mò, étrò àkɔkɔ̀ avalà.

turkey IV+lay+thing Á+PRES+have bigness, A+PRES+surpass chicken IV+lay+thing.

'Turkey eggs are bigger than chicken eggs.'

30. ùfo ɔ̀di lɛwɔlà líŋwí.

fufu O+be IV+pound+thing one

'Fufu is one thing that's pounded.'

31. àkɔsùà ɔ́ɔwɔ, ńsù kébù awɔlà.

Akɔsua O+PAS+CONT+give-birth, but INDEF+remain
    IV+give-birth+thing

'Akɔsua has given birth, but the afterbirth
    still remains.'

32. sìka ɔ̀di mia lɛvɔlà.

mɔney O+be my IV+like+thing

'Money is my desire.'

33. bɛ̀cùani nadì livulà lɛ́nvɔ̀ fuì békpì.

people REL+PAS+eat IV+steal+thing LE+that all
    3p+PAS+die

'All the people whɔ ate the stɔlen goods died.'

Derived Nouns of Place. Derived Nouns of Place presumably derive from structures in which the "dummy" noun is the object of the connective nà 'at, in' in a relative clause. (nà is discussed more fully in the section on Directionals, pp 360ff.

P15 N_{Place} ------) [+N, -Animate, +Count] S_{Place}

P16 S_{Place} ------) INDEF + VSt (NP) nà [+N, -Animate, +Count]

This gives us the formula:

something [$_S$ INDEF + VSt (NP) nà *something*]$_S$,

which can be exemplified by:

something [$_S$ INDEF + -dì nà *something*]$_S$
'eat'

something [$_S$ INDEF + -ni ntɛ nà *something*]$_S$
'drink' 'palm-wine'

something [$_S$ INDEF + -nyè nà *something*]$_S$
'wait'

something [$_S$ INDEF + -fɔ̀ àlà nà *something*]$_S$
'wash' 'things'

The deep structure is then altered as follows: the Verb Stem is prefixed with KA- , the prefix to Noun Class

XV, and suffixing the Verb Stem with -kɔ̀ (which Höftmann (1965) views as being the stem to the directional noun akɔ̀ 'vicinity'). As for other derived nouns, the object of the verb, if any, in the relative clause is transposed to appear before the new noun formed, and everything else is deleted.

T8 SD: something $_S$ INDEF + VSt (NP) nà something $_S$

SC: (NP) ± KA- + VSt + kɔ̀ ±

This rule converts the structures on the previous page to

KA-dì-kɔ̀	'eating place; dining room'
ntɛ KA-ni-kɔ̀	'palm-wine drinking place'
KA-nyè-kɔ̀	'waiting place'
àlà KA-fɔ̀-kɔ̀	'place to wash clothes'

The Vowel Harmony rule of p 70 and the nasalized vowel realization rule of pp 85-8 apply, and the prefix is given the same tone [illegible] the first syllable of the Verb Stem, the Verb Stem retaining its inherent tone.

T9 SD: ± KA- + VSt + kɔ̀ ±

$$\text{SC:}\ \pm\ \underset{\begin{bmatrix}\beta\text{LoTo}\end{bmatrix}}{\underset{\begin{bmatrix}-\alpha\text{Adv}\end{bmatrix}}{\text{KA}}}\quad \underset{\left(\begin{bmatrix}+\text{Syll}\\ \beta\text{LoTo}\end{bmatrix}\right)}{\underset{\begin{bmatrix}\alpha\text{Adv}\end{bmatrix}}{\text{VSt}}}\ +\ \underset{\begin{bmatrix}+\text{Syll}\end{bmatrix}\ \langle+\text{Nas}\rangle}{\langle\hat{ŋ}\rangle}\ +\ \text{kɔ̀}\ \pm$$

The surface forms for the structures on page 154 is, therefore,

kàdìkɔ̀	'eating place; dining room'
ntɛ kanikɔ̀	'palm wine bar'
ntɛ kaniŋ̀kɔ̀	
kènyèkɔ̀	'waiting room'
kènyèŋ̀kɔ̀	
àlà kàfɔ̀kɔ̀	'place to wash clothes'

Other examples of Derived Nouns of Place are:

bɔŋwa ======) kaŋwaŋ̀kɔ̀/kaŋwakɔ̀

'to cook' 'kitchen'

bɔ̀ŋwà ======) kàŋwàŋ̀kɔ̀/kàŋwàkɔ̀

'to harvest' 'harvesting site'

bɔ̀nyì ======) kànyìŋ̀kɔ̀/kànyìkɔ̀

'to excrete' 'latrine'

bɔ̀sà ======) kàsàkɔ̀

'to treat, heal' 'hospital'

bɔtɛ ======) katɛŋ̀kɔ̀/katɛkɔ̀

'to sleep' 'bedroom'

bɔ̀tiya ======) kàtiyakɔ̀

'to learn' 'school'

Although Derived Nouns of Place are invariable, they are, nonetheless, count nouns and can occur in phrases like:

bàkɔkɔ̀ kavaŋ̀kɔ̀ kéŋwí	'one chicken laying box'
bȁkɔkɔ̀ kavaŋkɔ̀ ínyɔ́	'two chicken laying boxes'
lɛlɔ kàsàkɔ̀ kéŋwí	'one hospital'
lɛlɔ kàsàkɔ̀ ínyɔ́	'two hospitals'

Derived Nouns of Place occur in sentences like:

34. ɔ́slà sìka nà ŋwa kafɔkɔ̀ kemo.
3s+PAS+place money in its receive+place inside
'He put the money in its reception place.'

35. útì ŋwa adi úbòkù nà kàfɔ̀kɔ̀.
3s+PAS+take his clothes 3s+PAS+bring in wash+place
'She took her clothes and brought them to the laundry.'

36. ànta kàŋwàŋ̀kɔ̀ kàca nà ȕlu kudɔ.
corn harvest+place KA+is-at in road side
'The corn harvesting site is near the road.'

37. uni mɔ̀bĺa kutu nà kaŋwaŋ̀kɔ̀ kemo.
mother REL+PRES+make soup in cook+place inside
'It's Mother who makes soup in the kitchen.'

In addition to the preceding Derived Nouns of Place which are formed from Verb Stems, there is one Derived Noun of Place, àjumakɔ̀ 'work place', which is formed from a noun, àjuma , a word for 'work' borrowed from Twi.

Other Derived Nouns. In addition to the productive forms of nominal derivation already discussed, there is one further type which is of limited and somewhat idiosyncratic productivity; this type, discussed in passing on page 116 , gives rise to abstract nouns, nouns of manner, cognate object nouns, and cognate nouns of means, etc. Derived nouns of this sort are formed by prefixing KA- or KO- or LE- to the Noun Stem or Verb Stem for which an abstract, etc. is to be formed. Unfortunately, however, there are no general principles by which a rule can be formulated as to which prefix goes with which stem, so that the appropriate nominalizing prefix (or abstract forming prefix in the case of nouns with non-abstract forms) must be stated separately for each stem and cannot be introduced transformationally (cf. Chomsky (1970)). That this is the case is shown by the following:

ɔ̀ŋwani	bà-	======)	kɔ̀ŋwani
'sibling'			'relationship'
ɔ̀nʋŋ̀kù	bà-	======)	lɛ̀nuŋ̀kù uwi
'old man'			'old age'
ɔnamù	ba-	======)	lɛnamù uwi
'child'			'childhood'
oklofu	ba-	======)	lɛklofʋ uwi
'youth'			'yɔuth'
ɔti	ba-	======)	kɔti
'father'			'paternity'
ɔga	ba-	======)	lɛga
'chief'			'chieftaincy'
bɔbla		======)	kabla
'work'			'wɔrk'
bɔca		======)	kɔca
'be at; score'			'shame, disgrace'
bɔdu		======)	kadu
'hurt'			'rheumatism'

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bɔfɛ	======)	lɛfɛ
'blow'		'nasal mucus'
bɔja	======)	kaja
'exceed'		'excess'
bɔkɔ	======)	kɔkɔ, a-
'mill'		'mill'
bùkpì	======)	kùkpì
'die'		'death'
bɔ̀lɛ̀	======)	lɛ̀lɛ̀
'sleep'		'sleep'
bɔ̀nɔ̀	======)	kɔ̀nɔ̀
'urinate'		'urine'
bɔnu	======)	kanu
'see'		'mirror'
bɔŋwa	======)	lɛŋwa
'cook'		'way of cooking'
bɔ̀sì	======)	kɛ̀sì
'be from'		'home'
bɔ̀sùsù	======)	kàsùsù
'think'		'thought'
bɔ̀tɛ̀	======)	kɔ̀tɛ̀
'judge'		'conversation'

butemi	======)	litemi
'speak'		'language'
bɔtɔ	======)	katɔ, kɔ-
'dance'		'dance'
bɔwunà	======)	lɛwunà
'breathe'		'sigh'
buye	======)	kuye
'trade'		'price; market place'

In these cases, the Complex Symbols would have forms rather like:

-ga [+N, Ia___, +Human 'chief': XIV__, +Abstract]
-ti [+N, Ia___, +Human 'father': XVI__, +Abstract]

in the case of noun-noun pairs, or

-lɛ [+V, Anim___, -___NP, -Stative; +N, XIV__,
 +Abstract] 'sleep'
-kpì [+V, Anim___, -___NP, -Stative; +N, XVI__,
 +Abstract] 'die'
-ŋwa [+V, Anim___, -___Abstract, -Stative; +N,
 XIV__, +Abstract] 'cook'
-tɔ [+V, Anim___, ___Cognate, -Stative; +N, VI__,
 -Animate, -Abstract] 'dance'

in the case of verb-noun pairs.

Possessors

Possessors always precede the noun possessed. A possessor can be either a Nominal group followed by an optional Quantifier or a Possessive Pronoun. It is possible that a Quantifier can follow a Possessive Pronoun; however, this would be extremely rare and does not occur in my corpus at all.

$$\text{P17} \qquad \text{Poss} \text{ -------)} \qquad \left\{ \begin{array}{l} \text{Nom (Quant)} \\ \text{Pro}_{\text{Poss}} \end{array} \right.$$

Nominal possessors. While word order is sufficient to mark possession, there are also some tonal alternations involved when a Nominal group is the possessor of a noun. These tonal alternations are progressive rather than regressive, in the sense that the tone of the Nominal group affects the tone of the noun possessed rather than *vice versa*. The following principles apply:

i. If the noun possessed has three or more syllables, then there is no tonal alternation:

ɔ̀nànà	+	ɔ̀siì	=====)	ɔ̀nànà ɔ̀siì
'man'		'gourd'		'a man's gourd'
ɔ̀nànà	+	ɔ̀klantìɛ̀	=====)	ɔ̀nànà ɔ̀klantìɛ̀
'man'		'cutlass'		'a man's cutlass'
ɔ̀fɔ	+	ɔ̀klàma	=====)	ɔ̀fɔ ɔ̀klàma
'stranger'		'dog'		'a stranger's dog'
baga fwiì	+	bànànà	=====)	baga fwiì bànànà
ćhiefs all		'man'		'the men of all the chiefs'
'all chiefs'				

ii. If the final tone of the Nominal group is Low, then there is no alternation in the tone of the noun possessed:

ɔ̀nà	+	lìlù	=====)	ɔ̀nà lìlù
'friend'		'yam'		'a friend's yam'
ɔ̀nà	+	èse	=====)	ɔ̀nà èse
'friend'		'goat'		'a friend's goat'
ɔ̀nà	+	kama	=====)	ɔ̀nà kama
'friend'		'back'		'a friend's back'
ɔga ɔ́mɔ̀	+	lìlù	=====)	ɔga ɔ́mɔ̀ lìlù
ćhief the		'yam'		'the chief's yam'
'the chief'				

ɔga ɔ́mɔ̀ + èse =====) ɔga ɔ́mɔ̀ èse
'the chief' 'goat' 'the chief's goat'
ɔga ɔ́mɔ̀ + lɛtɔ =====) ɔga ɔ́mɔ̀ lɛtɔ
'the chief' 'houses' 'the chief's houses'

iii. If the final tone of the Nominal group is High, then there is no alternation in the tone of the noun possessed:

ɔga úηwí + lìlù =====) ɔga úηwí lìlù
'one chief' 'yam' 'one chief's yams'
ɔga úηwí + èse =====) ɔga úηwí èse
'one chief' 'goat' 'one chief's goat'
ɔga úηwí + lɛtɔ =====) ɔga úηwí lɛtɔ
'one chief' 'houses' 'one chief's houses'

iv. If the final two tones of the Nominal group are Mid, then there is no alternation in the tone of the noun possessed if its first tone is Low:

ɔga + lìlù =====) ɔga lìlù
'chief' 'yam' 'a chief's yams'
ɔga + èse =====) ɔga èse
'chief' 'goat' 'a chief's goat'

However, if the first tone of the noun possessed is

Mid, then the tone of the noun possessed is downstepped optionally:

ɔga	+	lɛtɔ	=====)	ɔga lɛtɔ, ɔga 'lɛtɔ
'chief'		'houses'		'a chief's houses'
ɔkpɛ	+	kuli	=====)	ɔkpɛ kuli, ɔkpɛ 'kuli
'grasscutter'		'head'		'a grasscutter's head'
ɔtɔ	+	kemo	=====)	ɔtɔ ŋ kemo, ɔtɔ ŋ̃ 'kemo
'house'		'inside'		'inside the house'

v. If the final two tones of the Nominal group are Low-Mid, then there are a number of different alternations:

a. If the inherent tone of the noun possessed is Low-Low, then it becomes Mid-Low:

ɔ̀ŋwa	+	lìlù	=====)	ɔ̀ŋwa lilù
'sibling'		'yam'		'a brother's yams'
èse	+	ɔ̀gbà	=====)	èse ɔgbà
'goat'		'foot'		'a goat's foot'

b. If the inherent tone of the noun possessed is Low-Mid, then it becomes High-Mid:

ɔ̀ŋwa	+	èse	=====)	ɔ̀ŋwa ése
'sibling'		'goat'		'a brother's goat'

Possessor	Possessed lìlù 'yam'	 èse 'goat'	 ⊃t⊃ 'house'
⊃̀nà 'friend'	⊃̀nà lìlù	⊃̀nà èse	⊃̀nà ⊃t⊃
⊃̀ŋwa 'sibling'	⊃̀ŋwa lilù	⊃̀ŋwa ése	⊃̀ŋwa ⊃t⊃
⊃ga 'chief'	⊃ga lìlù	⊃ga èse	⊃ga ⊃t⊃, ⊃ga '⊃t⊃

Figure XI

Tonal Alternation with Possessives

èse	+	lɛ̀nyi	=====)	èse lɛ́nyi
'goat'		'tɔɔth'		'a goat's tɔɔth'
ɔ̀ja	+	ɔ̀ŋwa	=====)	ɔ̀ja ɔ́ŋwa
'husband'		'sibling'		'a husband's sibling'

c. If the inherent tone of the noun possessed is Mid-Mid, then there is no alternation:

ɔ̀ŋwa	+	ɔtɔ	=====)	ɔ̀ŋwa ɔtɔ
'sibling'		'house'		'a brother's house'
èse	+	kama	=====)	èse kama
'gɔat'		'back'		'a goat's back'

vi. There are no other alternations caused by possession.

I have schematized the tonal alternations caused by possession in Figure XI.

Possessive Pronouns. The members of the series of possessive pronouns vary with the dialect of the Buɛm speaker. In the Baglɔ sub-dialect of Lɛ̀lɛ̀mi, all possessive pronouns must agree with their referent in number and person or noun class membership, although in rapid speech the unmarked possessive pronoun form, ŋwa , is often used to refer to inanimate possessors. The series of possessive pronouns used in Baglo and Baglo-Odumase is:

1s	mùnà	mùnà ɔtɔ	'my house'
2	fùnà	fùnà ɔtɔ	'your house'
3	ŋwa	ŋwa ɔtɔ	'his/her/its house'
1p	bua	bua ɔtɔ	'our house'
2	bina	bina ɔtɔ	'your house'
3	bana, mana	bana ɔtɔ mana ɔtɔ	'their house'

O-, A- (Anim)	ŋwa	ŋwa ɔtɔ	'his/her/its house'
BA-	bana mana	bana ɔtɔ mana ɔtɔ	'their house'
A- (Inanim)	ana	ana ɔtɔ	'A-'s house'
LE-	anya	anya ɔtɔ	'LE-'s house'
KA-	kana	kana ɔtɔ	'KA-'s house'
KO-	kuna	kuna ɔtɔ	'KO-'s house'
N-, BO-	anya	anya ɔtɔ	'N-, BO-'s house'

Possessive pronouns are used in sentences such as:

mɔ̀yɔ ɔtɔ ɔ́mɛ̀ ɔsìka ŋwa kuye kɔ̀dìa.
I+PRES+like house this because its price XVI+PRES+be-good
'I like this house because its price is good.'

mɔ̀yɔ lɛtɔ lɛ́mɛ̀ ɔsìka anya kuye kɔ̀dìa.
'I like these houses because their price is good.'
mɔ̀yɔ lìbwì lɛ́mɛ̀ ɔsìka anya kuye kɔ̀dìa.
'I like this pot because its price is good.'
mɔ̀yɔ èbwì ámɛ̀ ɔsìka ana kuye kɔ̀dìa.
'I like these pots because their price is good.'
mɔ̀yɔ kàbɛ̀ kámɛ̀ ɔsìka kana kuye kɔ̀dìa.
'I like this fish because its price is good.'
mɔ̀yɔ kɔ̀bɛ̀ kɔ́mɛ̀ ɔsìka kuna kuye kɔ̀dìa.
'I like these fish because their price is good.',
etc.

Inalienable Possession. Special marking of a noun as being subject to inalienable possession is not a significant characteristic of Buɛm, and the names of body parts can occur with or without a possessor indifferently:

kuli kɔɔdu mi.
head VII-I+PRES+hurt me
'My head hurts.'

is not, for example, very much more commonly used than mùnà kuli kɔɔdu ni.

my head VIII+PRES+hurt me

'My head hurts.'

nor is

kuli kɔɔdu ma.

head VIII+PRES+hurt them

'Their heads hurt.'

much more common than

bana eli aadu ma.

their heads VIII+PRES+hurt them

'Their heads hurt.'

The rule seems to be that if the noun referring to the body part is the subject of the sentence, then either a possessive pronoun can be used with the appropriate singular/plural form of the noun or the possessive pronoun can be omitted and the singular form of the body part can be used alone. When the body part is not the subject of the verb, then both the possessor of the body part and the body are treated as objects of a double-transitive verb:

ɔ́tà mà kafɔ.

3s+PAS+kick them belly.

'He kicked them in the belly.',

where the body part is in the singular.

Noun Modifiers

A Noun may be modified by any or all of the following:

i. A Sex marker (Sex),
ii. Participles (Part),
iii. Numbers (Num),
iv. Adjectives (Adj),
v. A Determiner (Det), and/or
vi. Relative Clauses (S_{Rel}).

These occur in the following order:

P18 Modif -----) (Sex)(Part)(Num)(Adj)(Part)(Det)(S_{Rel})

Sex Markers

Animate nouns may, but need not, be specified for their sex. There are two pairs of nouns in common use to denote sex: ɔ̀nànà, bà- 'man' and ɔ̀lɔ̀ku, bè- 'woman' form one pair, and ɔ̀jane, bà- 'husband' and ùlɛne, bè- 'wife' form the other pair. The pair ɔ̀nànà/ɔ̀lɔ̀ku can be used to modify both nouns referring to humans and nouns referring to other animates; the other pair, ɔ̀jane/ùlɛne modifies only non-human animates: if either ɔ̀jane or ùlɛne follows a human noun, then the human noun is interpreted as being the possessor of ɔ̀jane 'husband' or ùlɛne 'wife', as the case may be:

àlà ɔ̀tìnane ɔ̀jane	'the teacher's husband'
	*'the male teacher'
àlà ɔ̀tìnane ~~ɔ̀lɔ̀ku~~ ùlɛne	'the teacher's wife'
	*'the lady teacher'

This is schematized by:

P19 $$\text{Sex} \text{ -----)} \begin{Bmatrix}\text{Male}\\ \text{Female}\end{Bmatrix} \quad / \quad [+\text{N}, +\text{Animate}]\_\_\_\_$$

P20 $$\text{Male} \text{ ---)} \begin{Bmatrix}\text{ɔ̀jane}\\ \text{ɔ̀nànà}\end{Bmatrix} \quad / \quad [+\text{N}, -\text{Human}]\_\_\_\_$$

P21 $$\text{Female} \text{ --)} \begin{Bmatrix}\text{ɔ̀lɔ̀ku}\\ \text{ùlɛne}\end{Bmatrix} \quad / \quad [+\text{N}, -\text{Human}]\_\_\_\_$$

As the following examples show, the Sex marker varies in number with the noun it modifies:

ɔ̀nàncwi ɔ̀nànà	or	ɔ̀nàncwi ɔ̀jane	'bull'
bànàncwi bànànà	or	bànàncwi bàjane	'bulls'
ɔ̀nàncwi ɔ̀lɔ̀ku	or	ɔ̀nàncwi ùlɛne	'cow'
bànàncwi bèlɔ̀ku	or	bànàncwi bèlɛne	'cows'
àkɔkɔ̀ ɔ̀nànà	or	àkɔkɔ̀ ɔ̀jane	'rooster'
bàkɔkɔ̀ bànànà	or	bàkɔkɔ̀ bàjane	'roosters'
àkɔkɔ̀ ɔ̀lɔ̀ku	or	àkɔkɔ̀ ùlɛne	'hen'
bàkɔkɔ̀ bèlɔ̀ku	or	bàkɔkɔ̀ bèlɛne	'hens'
èse ɔ̀nànà	or	èse ɔ̀jane	'billy-goat'
bèse bànànà	or	bèse bàjane	'billy-goats'
èse ɔ̀lɔ̀ku	or	èse ùlɛne	'nanny-goat'
bèse bèlɔ̀ku	or	bèse bèlɛne	'nanny-goats'
àlà ɔ̀tìnane ɔ̀nànà			'male teacher'
àlà bàtìnane bànànà			'male teachers'
àlà ɔ̀tìnane ɔ̀lɔ̀ku			'lady teacher'
àlà bàtìnane bèlɔ̀ku			'lady teachers'
skubi ɔ̀nànà			'school-boy'
skubi bànànà			'school-boys'
skubi ɔ̀lɔ̀ku			'school-girl'
skubi bèlɔ̀ku			'school-girls'

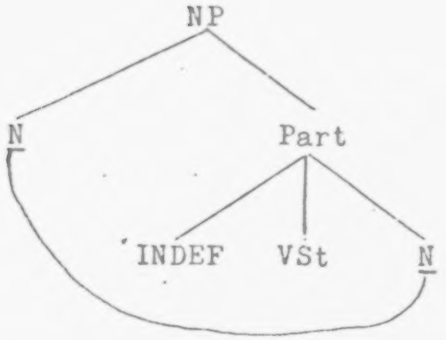
Participles

Participles arise from underlying sentences in which the head noun of the Noun Phrase is either the object of a transitive verb or the subject of an intransitive verb; as far as I can tell, the verb may be any verb except a copular verb, the iteritive verb bɔsɔ 'to again', or a verb of ability, of speaking or of motion.

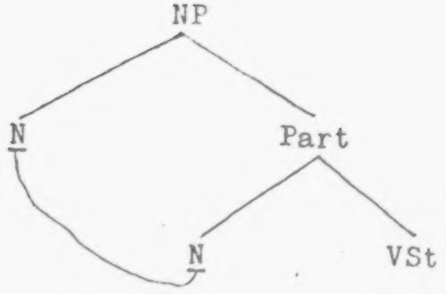
$$\text{P22}\qquad \text{Part} \text{ -----) } \left\{\begin{array}{l} \pm\ \text{INDEF} + \text{VSt} + \text{N} \pm \\ \pm\ \text{N} + \text{VSt} \pm \end{array}\right.$$

$$\text{where}\quad \text{VSt} = \left[\begin{array}{l} +\text{V},\ -\text{Cop},\ -\text{It},\ -\text{Motion} \\ \qquad -\underline{\quad\quad}\text{S} \end{array}\right]$$

This underlying structure is represented by:



with respect to the first part of the rule and by



with respect to the second part of the rule. In the linear notation, these are schematized by the formulae:

$$\underline{N}\ [_S\ \text{INDEF} + \text{VSt} + \underline{N}]_S$$

e.g.,

$$\underline{N}\ [_S\ \text{INDEF} + \underset{\text{'kill'}}{\text{-dũ}} + \underline{N}]_S$$

$$\underline{N}\ [_S\ \text{INDEF} + \underset{\text{'cook'}}{\text{-ŋwa}} + \underline{N}]_S$$

$$\underline{N}\ [_S\ \text{INDEF} + \underset{\text{'harvest'}}{\text{-ŋwà}} + \underline{N}]_S$$

$$\underline{N}\ [_S\ \text{INDEF} + \underset{\text{'open'}}{\text{-lɛ̀mì}} + \underline{N}]_S$$

$$\underline{N}\ [_S\ \text{INDEF} + \underset{\text{'spoil'}}{\text{-bìlè}} + \underline{N}]_S$$

and

$$\underline{N}\ \left[_{S}\ \underline{N}\ +\ \text{VSt}\right]_{S}$$

e.g.,

$$\underline{N}\ \left[_{S}\ \underline{N}\ +\ \text{-kpì}\right]_{S}$$

'die'

$$\underline{N}\ \left[_{S}\ \underline{N}\ +\ \text{-bã}\right]_{S}$$

'be cold'

$$\underline{N}\ \left[_{S}\ \underline{N}\ +\ \text{-lɛ̀mì}\right]_{S}$$

'be open'

$$\underline{N}\ \left[_{S}\ \underline{N}\ +\ \text{-bìè}\right]_{S}$$

'be spoilt'

It will be noted that -lɛ̀mì 'open; be open' and the pair -bìlè/-bìè 'spoilt; be spoilt' are on both lists. In the case of -lɛ̀mì 'open; be open', this is because the verb can be used both transitively and intransitively (see pages 337-8); in the case of -bìlè/-bìè 'spoil; be spoilt', this is because it is possible to form a participle both from the intransitive form of the verb and from the transitive form (marked by the -LE suffix) as well (see pages 247ff), with the participle formed from the causative form apparently indicating deliberate action.

To anticipate a bit, we get, for example, the pairs

$$\left.\begin{array}{l}\text{kutu kùbiɛdi}\\ \text{kutu kùbilɛdi}\end{array}\right\}\quad\text{'spoilt soup'}$$

$$\left.\begin{array}{l}\text{ǹcwɛni bɔ̀cuidi}\\ \text{ǹcwɛni bɔ̀culadi}\end{array}\right\}\quad\text{'burnt firewood'}$$

in which the participle in the first member of each pair leaves the question of the cause of the spoiling or burning open, whereas the participle in the second member of each pair implies that the spoiling or the burning was caused by some agent.

The P-markers just shown are altered as follows: the Verb Stem is prefixed with a concord marker (Conc), which falls on a Low tone, the tone(s) of the Verb Stem are raised to Mid, and the Verb Stem is suffixed with -di , which may, perhaps, be the stem of the dèterminer ɔ̱.di 'a certain'. Everything else is deleted.

$$\text{T10}\qquad \text{SD:}\quad N\ (Y)\left\{\begin{array}{lllllll}\pm & \text{INDEF} & + & \text{VSt} & + & N & \pm\\ \pm & N & + & \text{VSt} & & & \pm\end{array}\right\}$$

$$\text{SC:}\quad N\ (Y)\ \pm\ \underset{[+\text{LoTo}]}{\text{Conc}}\ +\ \underset{[-\text{LoTo}]}{\text{VSt}}\ +\ \text{-di}\ \pm$$

where Y = any intervening Noun Modifier

The normal Vowel Harmony rule and Nasal Realization rule apply, and the surface forms of the structures on pages 175 and 176 is:

ɔ̲̀.dudi,	ɔ̲̀.dundi	'killed'
ɔ̲̀.ŋwadi,	ɔ̲̀.ŋwandi	'coɔked'
ɔ̲̀.ŋwadi,	ɔ̲̀.ŋwandi	'harvested'
ɔ̲̀.lɛmidi		'open(ed)'
ù̲.bilɛdi		'spɔilt'
ù̲.kpidi		'dead'; 'wicked, evil'
ɔ̲̀.badi	ɔ̲̀.bandi	'cold'
ù̲.biɛdi		'spɔilt'

as in

l̲i̲lu l̲ɛ̲̀ŋwandi	'cooked yam'; 'harvested yam'
k̲ɔ̲̀làkpi k̲ɔ̲̀dundi	'a killed snake'
l̲ɛ̲tɔ l̲ɛ̲̀lɛmidi	'open doɔrs'
ɔ̲ga ù̲kpidi	'a wicked chief'
ɔ̲̀nta ɔ̲̀kɔdi	'milled cɔrn'
b̲è̲se b̲è̲nyimidi	'snared gɔats'
ɔ̲̀nantu ɔ̲̀bandi	'cɔld rain'

There are three further comments to be made with re-

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spect to participles:

i. Occasionally, a one-word manner or time adverbial may follow the participle, as in

m̀ɔwìà kɔbɛtu kɔ̀bladi kàdwɛɛ̀.
1s+PRES+look fish+stew made well
II'm looking for some well-made fish stew.'
bèlèyeè kɔdi kùdidi bwɛ-bwɛ.
INDEF+FUT+NEG+buy cloth woven poorly
'People won't buy poorly woven cloth.'
bànà èse ɔ̀yudi kàmàdì nékpì.
their goat stolen yesterday REL+PAS+die
'It was their goat stolen yesterday that died.'

This entails modifying the P-rule on page 174 to read:

$$\text{Part -----)} \quad \left\{\begin{matrix} \pm & \text{INDEF} & + & \text{VSt} & + & \text{N} & \pm \\ \pm & \text{N} & + & \text{VSt} & & & \pm \end{matrix}\right\} \left(\left\{\begin{matrix} \text{Ad}_M \\ \text{Ad}_T \end{matrix}\right\}\right)$$

and the T-rule on page 177 to read:

$$\text{SD:} \quad \text{N} \quad (\text{Y}) \quad \left\{\begin{matrix} \pm & \text{INDEF} & + & \text{VSt} & + & \text{N} & \pm \\ \pm & \text{N} & + & \text{VSt} & & & \pm \end{matrix}\right\} \quad (\text{Adv})$$

$$\text{SC:} \quad \text{N} \quad (\text{Y}) \quad \pm \underset{[+\text{LoTo}]}{\text{Conc}} + \underset{[-\text{LoTo}]}{\text{VSt}} + \text{-di} \pm (\text{Adv})$$

ii. As noted in rule P18 on page 171, participles can both precede and follow numbers and adjectives. As yet, I have not been able to isolate any principles for placement, and it seems that phrases like

adi èjiɛdi ínyɔ́
cloths reddened two
'two red cloths'

and

adi ínyɔ́ èjiɛdi

are merely stylistic variants of one another.

iii. Participles can be used as substantives (i.e., as Derived Nouns of Utmost Suitability); in this case, if they are to denote an animate, they are marked with the prefixes for Noun Class Ia, O/BA; if they are to denote an inanimate, they are marked with the prefixes for Noun Class II, O/LE . Nouns of Utmost Suitability are used much less frequently than Nouns of Suitability, and are reserved to denote things which especially typify the action of the verb; hence, while àdìlà refers to any kind of food, ɔ̀didi refers to food for human consumption especially; while lɛ̀fɔ̀là refers to anything used in connection with washing, ɔ̀fɔdi, lɛ̀fɔdi is used to denote especially dirty clothes.

Numbers

Buɛm has both cardinal and ordinal numbers, with cardinal numbers preceding ordinal numbers when both are used together (See page 190 for examples).

P23 Num -----) (Cardinal)(Ordinal)

Cardinal numbers. The basic multiples in the system of numbers are 10's and 50's. The cardinal numbers, as used in counting, are:

1	úŋwí	
2	ínyɔ́	
3	ɛ̀tɛ̀	
4	ínɛ́	
5	ɛ̀lɔ̄́	
6	ɛ̀kū́	
7	matɛ̀	
8	mánɛ́	
9	leya liŋwi	(literally, 'remaining 1')
10	lɛ̀vu	
11	lɛ̀vuŋwì	
12	lɛ̀vúnyɔ́	

13	lɛ̀vu ɛ̀tɛ̀	
14	lɛ̀vúné	
15	lɛ̀vù ɛ̀lɔ̃́	
16	lɛ̀vù ɛ̀kṹ	
17	lɛ̀vù matɛ̀	
18	lɛ̀vù mánɛ́	
19	lɛ̀vù lɛ̀ya liŋwi	or lɛ̀vù laliŋwi
20	ààva nyo	(two 10's)
21	ààva nyo ùŋwì	
22	ààva nyo nyo	
23	ààva nyo ɛ̀tɛ̀	
...		
30	àvla àtɛ̀	(three 10's)
31	àvlatɛ ŋwì	
32	àvlatɛ nyo	
...		
40	àvlɛne	(four 10's)
41	àvlɛne ŋwì	
42	àvlɛne nyo	
...		
50	lìtì	

51	lìtì k'úŋwì	(50 + 1)
52	lìtì k'únyɔ́	
...		
60	lìtì ku lɛ̀vù	(50 + 10)
61	lìtì ku lɛ̀vuŋwì	
62	lìtì ku lɛ̀vúnyó	
...		
70	lìtì ku àvanyo	(50 + (10 x 2))
71	lìtì ku àvanyɔ uŋwì	
72	lìtì ku àvanyo nyɔ	
...		
80	lìtì ku àvɨa àtɛ̀	
...		
90	lìtì ku àvɨɛne	
...		
100	ètì ányɔ́	(two 50's) *or*
	óhà	(borrowed from Twi)
101	ètì ányɔ́ k'úŋwì	((50 x 2) + 1) *or*
	óhà k'úŋwí	
...		
111	ètì ányɔ́ ku lìvuŋwì	*or* óhà ku lìvuŋwì

...

200 ètì éné or óhà ínyɔ́

...

1000 m̀pimù (borrowed from Twi)

I offer no explanation for changes in vowels, consonants, or tones in the above list (e.g., ȁàva nyo '20' but àvla àtɛ̀ '30') other than that that's the way the Buɛm count.

Full concord applies only to the cardinal number úŋwí '1', which takes prefixes from the series for Advanced vowels.

T11 X + N (Y) úŋwí + X ======)

X + N (Y) ± Conc + -ŋwí ± + X

[+Adv]

where X = any string or none

Y = any intervening modifiers of N

ɔ̀nã̂nà úŋwí	'one man'
atu úŋwí	'one elephant'
ɔma úŋwí	'one town'
libwi líŋwí	'one pot'

kɔdi kúŋwí	'one cloth'
kàjìjɛ̀ kéŋwí	'one basket'

In general, concord doesn't apply to any other cardinal number, except that when the numbers ínyɔ́ '2' through ɛ̀kṹ '6' modifies a noun prefixed with A- immediately preceding, the number gets prefixed with /a-/ instead of its usual vowel, optionally.

ɓànànà ínyɔ́	'two men'
ɓatʋ ínyɔ́	'two elephants'
lɛma ínyɔ́	'two towns'
kɔ̀jìjɛ̀ ínyɔ́	'two baskets'
ebwi ányɔ́	'two pots'
adi ányɔ́	'two cloths'

ebwi àtɛ̀	'three pots'
ebwi ánɛ́	'four pots'
ebwi àlɔ̃́	'five pots'
ebwi àkṹ	'six pots'

adi àtɛ̀	'three cloths'
adi ánɛ́	'four cloths'

adi àlɔ̃́	'five cloths'
adi àkũ̌	'six cloths'

Ordinal numbers. Ordinal numbers are formed by suffixing -di , presumably the same -di that is the participle suffix, to the respective ordinal number. There is a suppletive form ù̱.de- which takes the place of úŋwí '1',

P24 Ordinal -----) Cardinal + -di

T12 ± úŋwī ± + -di ======) ± ù̱.dedi ±

The first six ordinal numbers are subject to concord as well; the ordinals corresponding to the cardinals úŋwí '1', ínyɔ́ '2', and íné '4' take prefixes from the Advanced series, and the ordinals corresponding to the cardinals ɛ̀tɛ̀ '3', ɛ̀lɔ̃́ '5', and ɛ̀kṹ '6' take prefixes from the Unadvanced series.

T13 ínyɔ́di ======) ù̱.nyɔdi

T14 ɛ̀tɛ̀di ======) ɔ̱̀.tɛdi

T15 ínédi ======) u̱.nedi

T16 ɛ̀lɔndi ======) ɔ̱̀.lɔndi

T17 ɛ̀kundi ======) ɔ̱̀.kundi

In isolation, then, the ordinal numbers are

1st	ùdedi
2nd	ùnyɔdi
3rd	ɔ̀tɛdi
4th	unedi
5th	ɔ̀lɔndi
6th	ɔ̀kundi
7th	matɛdi
8th	manɛdi
9th	leyàŋwidi
10th	lɛ̀vudi
11th	lɛ̀vuŋwidi
12th	lɛ̀vunyɔdi
...	
20th	àvlanyɔdi
...	
30th	àvlaàtɛ̀di
...	

and we can see the operation of concord in the following examples:

ùculi ùdɛdi	the 1st person

ùcʊli ùnyɔdi	the 2nd person
ùcʊli ɔ̀tɛdi	the 3rd person
ùcʊli matɛdi	the 7th person
bècʊli bèdɛdi	the 1st people
bècʊli bènyɔdi	the 2nd people
bècʊli bàtɛdi	the 3rd people
bècʊli matɛdi	the 7th people
lɛpa lìdɛdi	the 1st fruit bat
lɛpa lìnyɔdi	the 2nd fruit bat
lɛpa lɛ̀tɛdi	the 3rd fruit bat
lɛpa matɛdi	the 7th fruit bat
bapa bèdɛdi	the 1st fruit bats
bapa bènyɔdi	the 2nd fruit bats
bapa bàtɛdi	the 3rd fruit bats
bapa matɛdi	the 7th fruit bats
kawɛ kèdɛdi	the 1st mortar
kawɛ kènyɔdi	the 2nd mortar

kawɛ kàtɛdi	the 3rd mortar
kawɛ matɛdi	the 7th mortar
kɔwɛ kùdɛdi	the 1st mortars
kɔwɛ kùnyɔdi	the 2nd mortars
kɔwɛ kɔ̀tɛdi	the 3rd mortars
kɔwɛ matɛdi	the 7th mortars
kɔdi kùdɛdi	the 1st cloth
kɔdi kùnyɔdi	the 2nd cloth
kɔdi kɔ̀tɛdi	the 3rd cloth
kɔdi matɛdi	the 7th cloth
adi ɛ̀dɛdi	the 1st cloths
adi ɛ̀nyɔdi	the 2nd cloths
adi àtɛdi	the 3rd cloths
adi matɛdi	the 7th cloths

and so on.

Cardinal and ordinal numbers used together. As stated above, when cardinal and ordinal numbers are used together to modify a noun, the cardinal number precedes the ordinal:

bànànà manɛ bèdɛdi	'the first 8 men'
lɛma ínyɔ́ lìdɛdi	'the first 2 towns'

as in

sì asì Hohoe, lɛma ínyɔ́ lìdɛdi
when 2s+PRES+depart Hohoe, towns 2 first
'When you leave Hohoe, the first two towns
ǹdi Bɛfu, lɛma ínyɔ́ lìnyɔdi ǹdi Bakpɛ̀lɛ̀,
REL+be Akpafu, towns 2 second REL+be Likpe,
are Akpafu, the second two towns are Likpe,
lɛma ínɛ́ lɛ̀tɛdi ǹdi Bàlɛmi.
towns 4 third REL+be Lɛ̌lɛ̀mi
the third four towns are Lɛ̀lɛ̀mi.'

"Counting plurals". Of some interest, though of quite minimal importance within the language, is a phenomenon I call "counting plurals," a phenomenon restricted to about half a dozen nouns which have two distinct plural forms, one for use when the noun is not modified by a cardinal number and another for use when the noun is modified by a cardinal number.

ùculi úŋwí	'one person'
bèculi bámɛ̀	'these people'
ǹculi ɛ̀lɔ̃́ bámɛ̀	'these five people'

kɛ̀cwɛni kéŋwí	'one piece of firewood'
ɛ̀cwɛni ámɛ̀	'these pieces of firewood'
ǹcwɛni ɛ̀lɔ̃́ ámɛ̀	'these fives pieces of firewood'

The members of Noun Class IX, KA/N , may, perhaps, be a reduced version of this:

kemɔ kúŋwí	'one farm'
mmo ámɛ̀	'these farms'
mmo ɛ̀lɔ̃́ ámɛ̀	'these five farms'

kuvo kúŋwí	'one medicine'
mvo ámɛ̀	'these medicines'
mvo ɛ̀lɔ̃́ ámɛ̀	'these five medicines'

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Adjectives

There are under three dozen adjectives in Buɛm, all of which are invariable. Following is a list of all the adjectives which I was able to elicit.

bliì, blí-swè	small
bɔ̃	big
búní	good
bwɛ, bwɛ-bwɛ	bad
bɛ̀bɛɛ̀bɛ	wide
gɛ̃ɛ̃	true, rightful
jɛjɛ, jiɛ, jiɛ-jiɛ	red
jɔ̀lɔ̀ɔ̀	long
juɔ	distant
kana	important
kanja	tall
kɛdɛ	holy, sacred
kuku	old
kɛkɛ	useless, irresponsible
kpɔ	thick
kpɛlɛ	low

klùkuì	short
jɛɛlɛ	ordinary, average
lìdu-lìdu	different
piì	many
pim	great
ɛlɛɛ̀	few
mama	different
sɛ̃ɛ̃	clean, neat
su	dark
tũũ	black

In addition, there are two numerical adjectives, píì 'many, much' and ɛ̀lɛɛ̀ 'few'.

In addition to the above one-word adjectives, it is possible to form adjectival phrases by suffixing -di to a Noun Phrase referring to the characteristic desired; the two commonest adjectival phrases are

lìvɛ̀tɛ̀ lɛ̀wɔdi
leaf LE+born+di
'new leaf like', (i.e., 'green')

and

àkɔkɔ̀ lìmwidi

chicken fat+ɗi

'chicken-fat-like' (i.e., 'yellow'),

as in

kɔdi lìvɛ̀tɛ̀ lɛ̀wɔdi kɔ́mɔ̀

cloth leaf new-like that

'that green cloth'

and

kɔdi àkɔkɔ̀ lìmwidi kɔ́mɔ̀

cloth chicken fat-like that

'that yellow cloth'

Determiners

Determiners are used either to indicate the spatial relationship that a noun has to the speaker or to indicate referential relationship. All determiners are subject to concord, and all determiners take concordial prefixes from the Unadvanced series of prefixes.

$$\text{P25}\quad \text{Det}\quad \text{------)}\quad \text{Conc}\begin{cases}\text{Det}_{\text{Spa}}\\ \text{Det}_{\text{Ref}}\end{cases}$$

The absence of any determiner is normally the equivalent of the English indefinite article "a, an."

Spatial determiners. There are two different series of spatial determiners used in the Baglo sub-dialect of Lɛ̀lɛ̀mi: one series of two terms which is considered to be "Standard Buɛm" and another series of three terms which is used only locally.

"Standard Buɛm"

Speaker close	ɔ́.mɛ̀	'this'
Speaker far & hearer near; previous reference	ɔ́.mɔ̀	'that, the'

Baglo

Speaker close	ɔ̲́.mɛ̀	'this'
Speaker far & hearer close; previous reference	ɔ̲́.nvɔ̀	'that, the'
Speaker & hearer far	ɔ̲́.njɛ̀	'yonder'

"Standard"	Baglo	
ɔ̀nànà ɔ́mɛ̀	ɔ̀nànà ɔ́mɛ̀	'this man'
ɔ̀nànà ɔ́mɔ̀	ɔ̀nànà ɔ́nvɔ̀	'that, the man'
ɔ̀nànà ɔ́mɔ̀	ɔ̀nànà ɔ́njɛ̀	'yonder man'
bànànà bámɛ̀	bànànà bámɛ̀	'these men'
bànànà bámɔ̀	bànànà bánvɔ̀	'those, the men'
bànànà bámɔ̀	bànànà bánjɛ̀	'yonder men'
ɔma ɔ́mɛ̀	ɔma ɔ́mɛ̀	'this town'
ɔma ɔ́mɔ̀	ɔma ɔ́nvɔ̀	'that, the town'
ɔma ɔ́mɔ̀	ɔma ɔ́njɛ̀	'yonder'
lɛma lɛ́mɛ̀	lɛma lɛ́mɛ̀	'these towns'
lɛma lɛ́mɔ̀	lɛma lɛ́nvɔ̀	'those, the towns'
lɛma lɛ́mɔ̀	lɛma lɛ́njɛ̀	'yonder towns'

kabɛ kámɛ̀	kabɛ kámɛ̀	'this fish'
kabɛ kámɔ̀	kabɛ kánvɔ̀	'that, the fish'
kabɛ kámɔ̀	kabɛ kánjɛ̀	'yonder fish'
kɔbɛ kɔ́mɛ̀	kɔbɛ kɔ́mɛ̀	'these fish'
kɔbɛ kɔ́mɔ̀	kɔbɛ kɔ́nvɔ̀	'those, the fish'
kɔbɛ kɔ́mɔ̀	kɔbɛ kɔ́njɛ̀	'yonder fish'
kɔdi kɔ́mɛ̀	kɔdi kɔ́mɛ̀	'this cloth'
kɔdi kɔ́mɔ̀	kɔdi kɔ́nvɔ̀	'that, the cloth'
kɔdi kɔ́mɔ̀	kɔdi kɔ́njɛ̀	'yonder cloth'
adi ámɛ̀	adi ámɛ̀	'these cloths'
adi ámɔ̀	adi ánvɔ̀	'those, the cloths'
adi ámɔ̀	adi ánjɛ̀	'yonder cloths'
ntɛ bɔ́mɛ̀	ntɛ bɔ́mɛ̀	'this palm wine'
ntɛ bɔ́mɔ̀	ntɛ bɔ́nvɔ̀	'that, the p.w.'
ntɛ bɔ́mɔ̀	ntɛ bɔ́njɛ̀	'yonder p.w.'

The referential determiner. In addition to the determiners with spatial reference, there is one determiner ɔ̲.di 'a certain', which has no spatial reference, but which is used to refer to a specific individual or individuals, not previously referred to, which belong to a larger group of individuals. Its use, therefore, in a sentence like

ɔ̀klàma ɔdi ɔ́dù mùnà èse.
dog certain 3s+PAS+kill my goat
'A certain dog killed my goat.'

contrasts with the absence of a determiner in

ɔ̀klàma ɔ́dù mùnà èse.
dog 3s+PAS+kill my goat
'A dog killed my goat.',

in which the speaker is indifferent as to which dog, and with the use of any spatial determiner in

ɔ̀kl̲àma ɔ́mɔ̀ ɔ́dù mùnà èse.
dog the 3s+PAS+kill my goat.
'The dog killed my goat.' or 'That dog killed my goat.',

in which the dog in question has been previously referred to or is being pointed to.

As is the case with other determiners, the referential determiner is subject to concord and belongs to the Unadvanced vowel harmony pattern.

ɔ̀nànà ɔdi	'a certain man'
bànànà badi	'certain men'
ɔma ɔdi	'a certain town'
lɛma lɛdi	'certain towns'
kabɛ kadi	'a certain fish'
kɔbɛ kɔdi	'certain fish'
kɔ̄di kɔdi	'a certain cloth'
adi adi	'certain cloths'
ntɛ bɔdi	'certain palm wine'

It seems quite likely that the stem of the determiner, -di , is the suffix used with participles and is related to the noun ɔdi, lɛ- 'an article'; this view is enhanced by the existence of the pair ùtsuli, bè- 'a person' and ùcwɛdi, bè- 'somebody, certain people'.

Use with other modifiers. There seem to be no restrictions on the use of determiners with other modifiers other

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than with relative clauses, where some special forms are used. On a contrastive basis, it should be noted that determiners, especially spatial determiners, are used quite frequently with possessives:

mùnà èse ɔ́mɛ̀	'this goat of mine'
mùnà èse ɔ́mɔ̀	'that goat of mine'
mùnà bèse bámɛ̀	'these goats of mine'
mùnà bèse bámɔ̀	'those goats of mine'

Kɔ̀fi kɔdi kɔ́mɛ̀	'this cloth of Kofi's'
Kɔ̀fi kɔdi kɔ́mɔ̀	'that cloth of Kofi's'
Kɔ̀fi adi ámɛ̀	'these cloths of Kofi's'
Kɔ̀fi adi ámɔ̀	'those cloths of Kofi's'

It should also be noted that the spatial determiners can also be used with infinitives (see pp 224 ff):

ŋwa bafonù bɔku bɔ́mɛ̀ bɔ̀ɔdià.
his sheep INF+chew this XVIII+PRES+NEG+be good
'this eating of sheep of his'isn't good.'

Relative Clauses

A Relative Clause consists of a Relative Pronoun followed by a Sentence.

P26 S_{Rel} -------) RelP + Sent .

In Lɛ̀lɛ̀mi, the Relative Pronoun consists of a concord marker on Mid tone followed by -ni , which is probably the "oral comma" discussed on p7 445//; as for determiners, the concord markers for the Relative Pronoun come from the Unadvanced series.

$$\text{P27} \quad \text{RelP} \text{ -------) } \underset{\begin{bmatrix}-\text{HiTo}\\-\text{LoTo}\end{bmatrix}}{\text{Conc}} + \underset{[-\text{Adv}]}{-\text{ni}}$$

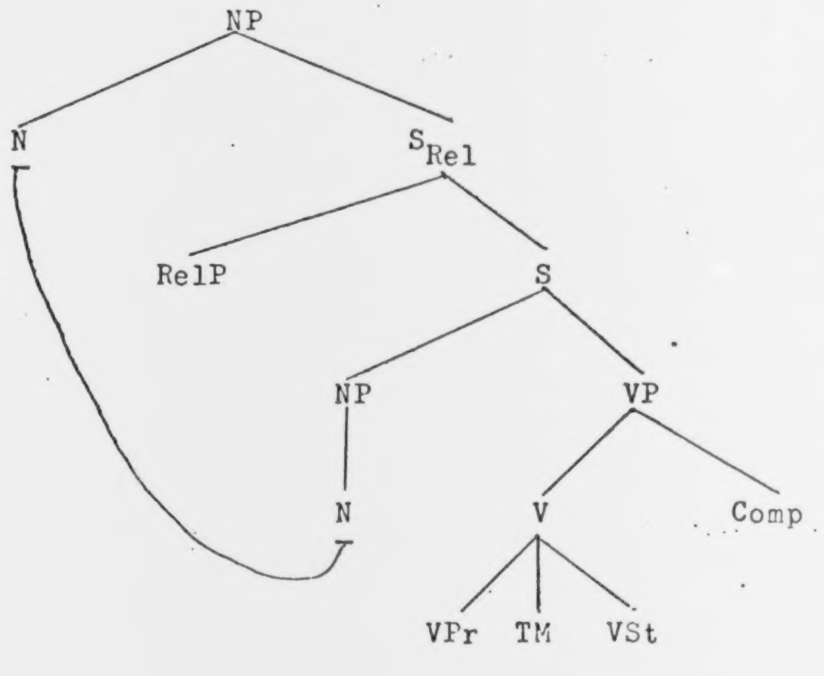
When the Relative Pronoun ɔ.ni follows the determiner ɔ́.mɛ̀ 'the, that', the two are merged to form ɔ̀.mɛ́ni .

T18 SD: ± Conc + -mɛ̀ ± + RelP

SC: ± Conc + -mɛ́ni ±

There are two different types of Relative Clause: in one type, the subject of the embedded sentence is referentially identical to the head noun which is modified by the Relative Clause; in the other type, the subject of the embedded sentence is different from the head noun the Relative Clause modifies. These two types will be referred to as "Same Subject" and "Different Subject", respecitively.

"Same Subject" Relative Clauses. These have underlying Phrase-markers approximately like:



where VPr = Verb Prefix, TM = Tense Marker, and Comp = Complement or in linear notation:

N Conc + -ni $[_S$ N + VPr + TM + VSt + Comp$]_S$

This Phrase-marker is exemplified by

ɔ̀nànà ɔni $[_S$ ɔ̀nànà VPr + PAS + -ku lɛna$]_S$

man RelP man VPr + PAS + chew meat

kɔ̀bɛ̀ kɔ́mɔ̀ kɔni $[_S$ kɔ̀bɛ̀ VPr + PRES + -kùì$]_S$

fish the RelP fish VPr + PRES + dry

bàasɛ̀ bani $[_S$ bàasɛ̀ VPr + FUT + -veì$]_S$

birds RelP birds VPr + Fut + fly

ɔ̀lɔ̀kubi ɔni $[_S$ ɔ̀lɔ̀kubi VPr + PAS + NEG + -ŋwa lìlù$]_S$

girl RelP girl VPr + PAS + NEG + cook yam

banabì bani $[_S$ banabì VPr + PRES + NEG + -ti àlà$]_S$

boys RelP boys VPr + PRES + NEG + know anything

lìbwì lɛ̀mɛ́ni $[_S$ lìbwì VPr + FUT + NEG + -bìè$]_S$

pot this+RelP pot VPr + FUT + NEG + .-break

These Phrase-markers are then transformed as follows: the subjects of the embedded sentences are deleted and the Verb Prefixes are rewritten as Relative forms (discussed on pp 324 ff).

T19 SD: N' (X) RelP (Poss) N' (Y) VPr + TM + Z

SC: N' (X) RelP + Rel + TM + Z

where X = intervening modifiers of N'

Y = (Modif)(Quant)

Z = the remainder of the Verb Phrase

The surface structures for the underlying Phrase-markers on the preceding page are, then,

ɔ̀nànà ɔni nakù lɛna

man RelP Rel+PAS+chew meat

'a man who ate meat'

kɔ̀bɛ̀ kɔ́mɔ̀ kɔni mɔ̀ɔkùì

fish the RelP Rel+PRES+dry

'the fish which are drying'

bàasɛ̀ bani ǹnuveì

birds RelP Rel+FUT+fly

'birds which will fly'

òlòkubi ɔni nàtaŋwa lìlù

girl RelP Rel+PAS+NEG+cook yam

'a girl who didn't cook yam'

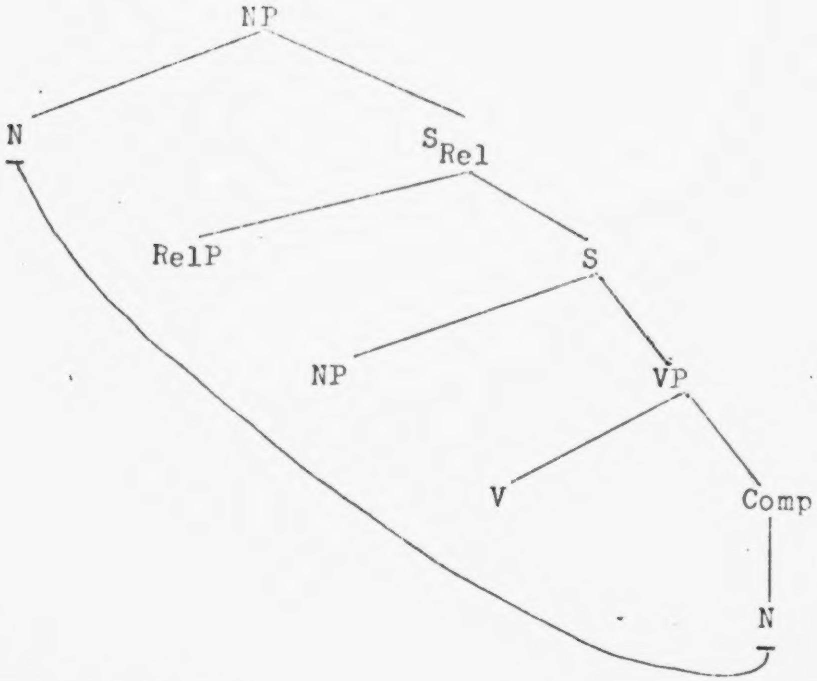
banabì bani nààti àlà
boys RelP Rel+PRES+NEG+know anything
'boys who don't know anything'

lìbwì lɛ̀mɛ́ni nèebiè
pot this+RelP Rel+FUT+NEG+break
'this pot which won't break'

Verbs whose prefix is rewritten as a concord marker are ungrammatical:

*ɔ̀nànà ɔni ɔ́kù lɛna
*kɔ̀bɛ̀ kɔ́mɔ̀ kɔni kɔ̀ɔkùì
*banabì bani bàlàti àlà

"Different Subject" Relative Clauses. There are two sub-types of the "Different Subject" type of Relative Clause: one in which the nominal common to both the embedded sentence and to the dominating Noun Phrase is the object of the verb of the embedded sentence, and the other in which the shared noun is the possessor of another noun in the embedded sentence. The first of these sub-types has an underlying structure approximately like:



or in linear notation:

N Conc + -ni $[_{S}$ NP + V + N $]_{S}$

This Phrase-marker is exemplified by:

ɔ̀nànà ɔni $[_{S}$ ɔ̀klàma ɔ́dù ɔ̀nànà $]_{S}$
man RelP dog 3s+PAS+bite man

kɔ̀bɛ̀ kɔni $[_{S}$ àjìrɛ̀mwa ɔ̀ɔ̀yɔ kɔ̀bɛ̀ $]_{S}$
fish RelP cat 3s+PRES+want fish

kutu kɔni $[_{S}$ mɛnsà ɔ̀lɔ̀di kutu $]_{S}$
stew RelP Mensah 3s+FUT+eat stew

ɔ̀bànci ɔni [$_S$ bátáku ɔ̀bànci]$_S$
cassava RelP 3p+PAS+NEG+chew cassava
ubi ɔni [$_S$ lítìnà ubi íŋgliʃ]$_S$
child RelP 1s+PAS+teach child English
lɛdi lɛni [$_S$ lítìnà ubi lɛdi]$_S$
language RelP 1s+PAS+teach child language

These Phrase-markers are converted to surface structures simply by deleting the shared nominal in the embedded Relative Clause.

T20 SD: N' (X) RelP + NP + V (Y)(Poss) N' (Z) (Y)
SC: N' (X) RelP + NP + V (Y)
where X = intervening modifiers of N'
Y = remainder of Complement not dominated by N'
Z = (Modif)(Quant)

The surface forms for the preceding underlying structures is, then,

ɔ̀nǎnà ɔni ɔ̀klàma ɔ́dù
'a man that a dog bit'
kɔ̀bɛ̀ kɔni àjìrɛ̀mwa ɔ̀ɔ̀yɔ
'fish that the cat wants'

kutu kɔni mɛnsà ɔ̀lɔ̀di

'stew Mensah will eat'

ɔ̀bànci ɔni bátáku

'cassava they didn't eat'

ubi ɔni lɨ́tìnà íŋgliʃ

'a child I taught English to'

lɛdi lɛni lɨ́tìnà ubi

'a language I taught a child'

When the shared noun is the possessor of a noun in the embedded sentence, then the only alteration in the embedded sentence is to replace the shared noun with the appropriate possessive pronoun.

skubi ɔni ŋwa ɔku ɔ́yì

'a schoolchild whose book got lost'

ɔga ɔni ŋwa ɔ̀klàma úyè mùnà kaakubi

'a chief whose dog stole my chicken'

ɔga ɔni mùnà ɔ̀klàma úyè ŋwa kaakubi

'a chief whose chicken my dog stole'

ɔtɔ ɔni ǹca ŋwa kemo

'a house I live inside of'

Quantifiers

There are eleven quantifiers which occur at the very end of a Noun Phrase containing either a Nominal group or an independent or objective pronoun. These quantifiers are:

biàlà	'any'
bũũ	'different'
ète	'only'
fwiì	'all'
gɛ̃ɛ̃	'real, actual, rightful'
kàni, kàni-ete	'the same'
lɛ̀nɔ̀	'as well, also'
lɛti, lɛti-pɛ	'only'
mɛnɛ	'and others similar'
sɔ̃ɔ̃	Baglo: 'only' Okajakrom: 'entire, whole, intact'
pɛ	'only'

Quantifiers are used in phrases like:

àbu fwiì	'all of us'
nànà àje mɛnɛ	'Nana Agyei and others like him'
bèse fwiì	'all goats'

ɔ̀nta ɔkɔdi lɛti-pɛ	'only milled corn'
lɛna lìfulɔdi lɛ̀nɔ̀	'boiled meat as well'
bètsuli matɛ pɛ	'only seven people
lìlù ɛ̀tɛ kàni	'the same three yams'
baga gɛ̃ɛ̃	'the true chiefs'
eji blí-swè ámɛ̀ sɔ̃ɔ̃	'only these small trees'
banamù biàlà	'any children'

Co-occurrence restrictions. It is possible for certain of the quantifiers to co-occur with each other, as in

baga gɛ̃ɛ̃ mɛnɛ	'true chiefs and others like them'
bànànà kàni ète	'only the same men'
skubi mɛnɛ fwiì	'all people like school-children
skubi fwiì mɛnɛ	'all school-children and others like them';

however, it was impracticable to note co-occurrence restrictions other than that fwiì 'all' is incompatible with the quantifier biàlà 'any', the number úŋwí 'one', and the numerical adjectives ɛlɛ̀ɛ̀ 'few', and piì 'a lot of'.

There are two other co-occurrence restrictions, which are rather more significant:

i. When mɛnɛ 'and others similar' is used as the quantifier of the subject of a verb or of the referent of a pronoun, then plural agreement forms must be used.

nànà àje mɛnɛ bébò mùna kudɔ.
Nana Agyei *et al.* 3p+PAS+come my side
'Nana Agyei and others like him came to me.'
*nànà àje mɛnɛ úbò mùna kudɔ.

ii. When the subject of a verb is modified by any of the quantifiers with the meaning "only", then a relative form of the verb must be used.

kwàku ète nébò.
Kwaku only Rel+PAS+come
'Only Kwaku came.'
bànànà ɛ̀tɛ bámɛ̀ lɛti-pɛ nékpì.
men three these only Rel+PAS+die
'Only these three men died.'

*kwàku ète úbò.

*bànànà ɛ̀tɛ bámɛ̀ lɛti-pɛ bébò.

Personal Pronouns

There are three series of personal pronouns:

i. Objective pronouns, which are used following a verb,

ii. Possessive pronouns, which function as the possessor of a Noun, and

iii. Independent pronouns, which are used for everything else.

P28 $$\text{Pro} \longrightarrow \left\{ \begin{array}{l} \text{Pro}_{\text{Obj}} \ / \ \text{V} \ \_\_\_ \\ \text{Pro}_{\text{Poss}} \ / \ \_\_\_ \ \text{N} \\ \text{Pro}_{\text{Ind}} \end{array} \right.$$

In addition, the verbal concord markers discussed on pp 238 ff can also be considered as a type of personal pronoun.

Personal pronouns are marked either for person and number or for Noun Class and number. There are three persons which are distinguished:

1s	the speaker	1p	the speaker(s) and others
2	one listener	2	more than one listener
3	some other	3	several others

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There are no sex distinctions made in the pronoun system, nor is there any distinction made between "inclusive" and "exclusive" "we." Some of the distinctions made by the Noun Class system are collapsed in the pronoun system: there are seven distinctions made in the series of independent and objective pronouns, and six in the series of possessive pronouns. Since there is no simple one-to-one mapping possible between the distinctions of the independent and objective pronouns and those of the possessive pronouns, I shall not attempt to set up underlying forms for the personal pronouns and then derive all the surface pronouns from these underlying forms, even though for most of the surface pronouns the relationships are clear.

Objective pronouns. Objective pronouns follow immediately after a verb, and, as for other verbal objects, can occur only once in a serial construction (see pp 396 ff). There is some dialectal variation in the series of objective pronouns; the Baglo series is:

1s	mì	1p	tù
2	ɔ̀	2	mi
3	ŋ̀	3	mà

Noun Prefix	
O-	ŋ̀
A- (sing.)	ŋ̀
Ø- (sing.)	ŋ̀
BA-	mà
Ø- (plur.)	mà
LE- (sing.)	nì
LE- (plur.)	nyà
A- (plur.)	nyà
KA-	kà
KO-	kù
N-	mù
BO-	mù

These objective pronouns are exemplified in sentences like:

ɔ́nù mì.	'He saw me.'
ɔ́nù ɔ̀.	'He saw you.'

ɔ́nù ŋ̀.	'He saw him/her/it.'
ɔ́nù bù.	'He saw us.'
ɔ́nù mà.	'He saw them.'
úyè èse; lɛ́nù ŋ̀.	'He bought a goat; I saw it.'
úyè bèse: lɛ́nù mà.	'He bought goats; I saw them.'
úyè ɔtɔ; lɛ́nù ŋ̀.	'He bought a house; I saw it.'
úyè lɛtɔ; lɛ́nù nyà.	'He bought houses; I saw them.'
úyè lìbwì; lɛ́nù nì.	'He bought a pot; I saw it.'
úyè èbwì; lɛ́nù nyà.	'He bought pots; I saw them.'
úyè kɔdi; lɛ́nù kù.	'He bought a cloth; I saw it.'
úyè adi; lɛ́nù nyà.	'He bought cloths; I saw them.'
úyè kàbɛ̀; lɛ́nù kà.	'He bought a fish; I saw it.'
úyè kɔ̀bɛ̀; lɛ́nù kù.	'He bought fish; I saw them.'
úyè kàjì; lɛ́nù kà.	'He bought a monkey; I saw it.'
úyè bàjì; lɛ́nù mà.	'He bought monkeys; I saw them.'
úyè ntɛ; lɛ́nù mù.	'He bought palm wine; I saw it.'

Independent pronouns. The series of independent pronouns uses the same distinctions as the series of objective pronouns. The same series of independent pronouns is used throughout the Buɛm-speaking area, and that series is:

1s	àmi	1p	àbu
2	àwo	2	amì
3	àŋu	3	àma

Noun Prefix

O-	àŋu
A- (sing.)	
∅- (sing.)	
BA-	àma
∅- (plur.)	
LE- (sing.)	àni
LE- (plur.)	ànya
A- (plur.)	
KA-	àka
KO-	àku
N-	àmu
BO-	

Independent pronouns are most commonly used for emphasis:

àmi lɛ́sì àmɛrìkà.	'I come from America.'
àwo ɔ́sì gánà.	'You come from Ghana.'

àŋu ɔ́sì nàìjirià.	'He comes from Nigeria.'
àbu bɔ́sì lisɛmi.	'We come frɔm Teteman.'
amì bɛ́sì baikà.	'Yɔu come from Baika.'
àma básì lɛgolò.	'They cɔme from Baglo.'

mɔ̀yɔ ese ɔ́nvɔ̀; àŋu ɔ̀dìa.

'I like that goat; it's fine.'

mɔ̀yɔ bese bánvɔ̀; àma bàdìa.

'I like those goats; they're fine.'

mɔ̀yɔ ɔtɔ ɔ́nvɔ̀; àŋu ɔ̀dìa.

'I like that house; it's fine.'

mɔ̀yɔ lɛtɔ lɛ́nvɔ̀; ànya lɛ̀dìa.

'I like those houses; they're fine.'

mɔ̀yɔ lìbwì lɛ́nvɔ̀; àni lɛ̀dìa.

'I like that pot; it's fine.'

mɔ̀yɔ èbwì ánvɔ̀; ànya àdìa.

'I like those pots; they're fine.'

mɔ̀yɔ kɔdi kɔ́nvɔ̀; àku kɔ̀dìa.

'I like that cloth; it's fine.'

mɔ̀yɔ adi ánvɔ̀; ànya àdìa.

'I like those cloths; they're fine.'

mɔ̀yɔ kàbɛ̀ kánvɔ̀; àka kàdìa.

'I like that fish; it's fine.'

mɔ̀yɔ kɔ̀bɛ̀ kɔ́nvɔ̀; àku kɔ̀dìa.

'I like those fish; they're fine.'

mɔ̀yɔ kàjì kánvɔ̀; àka kàdìa.

'I like that monkey; it's fine.'

mɔ̀yɔ bàjì bánvɔ̀; àma bàdìa.

'I like those monkeys; they're fine.'

mɔ̀yɔ ntɛ bɔ́nvɔ̀; àmu bɔ̀dìa.

'I like that palm-wine; it's fine.'

Independent pronouns can also be used as emphatic objects; in this case, they are fronted to appear before the subject of the verb.

T21 SD: $X + NP + V + Pro_{Ind} + X$

SC: $X + Pro_{Ind} + NP + V + X$

Hence, instead of

baalɔ̀ mì kwàku.

3p+PRES+call me Kwaku

'I'm called Kwaku.',

we get the much more common

àmi bààlɔ̀kwàku.

me 3p+PRES+call Kwaku

'I'm called Kwaku.' or 'My name is Kwaku.'

Similarly,

àwo bààlɔ̀ àkɔsuà.	'You're called Akosuah.'
àŋu bààlɔ̀ atta.	'He's called Attah.'
àbu bààlɔ̀ bàlɛ̀mi.	'We're called the Balɛmi.'
amì bààlɔ̀ bàbrùni.	'You're called "White men."'
àma bààlɔ̀ bɛfu.	'They're called the Akpafu.'

and, in the frame of

bààyɔ _____ ɔ̱́.nvɔ̀; ____ baga baawìà.

3p+PRES+want ____ that; ___ chiefs 3p+PRES+seek

'They want that ____; that's what chiefs seek.',

are

bààyɔ ese ɔ́nvɔ̀; àŋu baga baawìà.	'goat'
bààyɔ bese bánvɔ̀; àma baga baawìà.	'goats'
bààyɔ ɔtɔ ɔ́nvɔ̀; àŋu baga baawìà.	'hɔuse'
bààyɔ lɛtɔ lɛ́nvɔ̀; ànya baga baawìà.	'hɔuses'
bààyɔ lìbwì lɛ́nvɔ̀; àni baga baawìà.	'pot'
bààyɔ èbwì ánvɔ̀; ànya baga baawìà.	'pots.'
báàyɔ kɔdi kɔ́nvɔ̀; àku baga baawìà.	'cloth'

bààyɔ adi ánvɔ̀; ànya baga baawìà. 'cloths'

bààyɔ kàbɛ̀ kánvɔ̀; àka baga baawìà. 'fish'

bààyɔ kɔ̀bɛ̀ kɔ́nvɔ̀; àku baga baawìà. 'fish'

bààyɔ kàjì kánvɔ̀; àka baga baawìà. 'monkey'

bààyɔ bàjì bánvɔ̀; àma baga baawìà. 'monkeys'

bààyɔ ntɛ bɔ́nvɔ̀; àmu baga baawìà. 'palm-wine'

Finally, independent pronouns are used instead of objective pronouns as the second or subsequent object when a verb has two or more conjoined objects; the first pronoun object does come from the objective series, however.

lɛ́ɛwia lìbwì ku ɔ̀fɛ̀; líyè nì kù àŋu.
1s+PAS+CONT+seek pot and calabash; 1s+PAS+buy it and it
'I was looking for a pot and a calabash, and I bought them.'

lɛ́ɛwia avalà ku kamu; líyè nyà ku àka.
1s+PAS+CONT+seek eggs and rice; 1s+PAS+buy them and some
'I was looking for eggs and rice, and I bought them.'

(In rapid speech, however, the neutral form mà is oft used instead:

lέεwia lìbwì ku ɔ̀fɛ̀; líyè mà.

1s+PAS+CONT+seek pot and calabash; 1s+PAS+buy them

'I was looking for a pot and calabash, and I bought them.')

Possessive pronouns. Possessive pronouns have been discussed on pp 166 ff

Reflexive or reciprocal pronouns. The noun lɛlɔ (lɔlɔ in Okajakrom) 'body' is the closest equivalent in Buɛm to a reflexive or reciprocal pronoun. When lɛlɔ is used as the object of a verb, no possessive pronoun is used with it.

lέdù lɛlɔ.	'I killed myself.'
ádù lɛlɔ.	'You killed yourself.'
ɔ́dù lɛlɔ.	'He killed himself.'
bɔ́dù lɛlɔ.	'We killed ourselves.'
bέdù lɛlɔ.	'You killed yourselves.'
bádù lɛlɔ.	'They killed themselves.'

etc. When lɛlɔ is used to itensify the subject of the verb, a possessive pronoun *is* used with it.

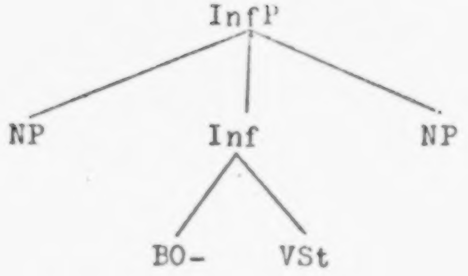
lɛ́dù jàta mùna lɛlɔ.	'I killed a lion myself.'
ádù jàta fùla lɛlɔ.	'You killed a lion yourself.'
ɔ́dù jàta ŋwa lɛlɔ.	'He killed a lion himself.'
bɔ́dù jàta bùla lɛlɔ.	'We killed a lion ourselves.'
bɛ́dù jàta bìna lɛlɔ.	'You killed a lion yourselves.'
bádù jàta bana lɛlɔ.	'They killed a lion themselves.'
kòfi ɔ́dù jàta ŋwa lɛlɔ.	'Kofi killed a lion himself.'

Infinitives

The final type of Noun Phrase is the Infinitival Phrase. An Infinitival Phrase has the following structure: an optional Noun Phrase which can function as the subject of the Verb Stem in the Infinitive, an Infinitive which consists of the Noun Class marker for Noun Class XVIII, BO- , followed by a Verb Stem, and following the Infinitive another Noun Phrase which can function as the object of the Verb Stem in the Infinitive. When the Infinitival Phrase is the subject of a sentence, it can also be followed by an optional spatial determiner marked for concord with Noun Class XVIII.

P29 InfP ----) (NP) Inf (NP) (BO- + Det_{Spa} /__VP)
P30 Inf -----) BO- + VSt

Ignoring the spatial determiner, a fully expanded Infinitival Phrase has the Phrase-marker overleaf:



The normal Vowel Harmony rule operates on the prefix to the infinitive, which has the same tone, in isolation, as the first tone of the Verb Stem.

T22 SD: BO- + VSt

$$\text{SC:}\quad \begin{array}{c} \text{BO-} \\ [\alpha\text{Adv}] \\ \\ [\beta\text{LoTo}] \end{array} \quad + \quad \begin{array}{c} \text{VSt} \\ [\alpha\text{Adv}] \\ ([+\text{Syll}])\ [+\text{Syll}] \\ [\beta\text{LoTo}] \end{array}$$

(There are certain tonal alternations which occur in context; these will be discussed presently.) The structures represented by these rules can be exemplified by:

kɔ̀fi bɔ̀ŋwà lìlù
Kofi INF+harvest yam
'Kofi's harvesting of yam'

amà bɔŋwa lìlù
Ammah INF+cook yam
'Ammah's cooking of yam'

ɔ̀klàma bɔ̀dù mùnə̀ èse

dog INF+bite my gɔat

'a dog's biting of my gɔat'

àjìrɛ̀mwa bɔdu

cat INF+kill

'a cat's killing'

bɔdu àjìrɛ̀mwa

INF+kill cat

'killing a cat'

bùmwì

INF+praise

'praising'

bɔtiyà àlà

INF+learn things

'learning'

The Infinitival Phrase as subject of a verb. When an Infinitival Phrase is used as the subject of a verb, the Noun Phrase object, if any, of the infinitive is transposed to appear immediately before the infinitive.

T23 SD: (NP_1) Inf + NP_2 + VP

SC: (NP_1) NP_2 + Inf + VP

If the infinitive has the tone pattern Low-Low and the noun preceding it has the tone pattern Low-Mid, then the tone of the infinitive becomes Mid-Low, as would be the normal tonal alternation in sequences of Noun + Noun, as illustrated in Figure XI on page 185; it makes no difference whether the noun preceding the infinitive is the subject of the infinitive or its object.

kɔ̀fi lìlù bɔ̀ŋwà bɔ̀dìa bù.
Kɔfi yam XVIII+harvest XVIII+be-good us
'Kofi's yam harvesting is good for us.'
amà lìlù bɔŋwa bɔ̀dìa bù.
Ammah yam XVIII+cook XVIII+be-good us
'Ammah's yam cooking is good for us.'
ɔ̀klàma mùnà èse bɔdù bɔ̀dìa bù.
dog my goat XVIII+bite XVIII+be-good us
'A dog's biting my goat is good for us.'
àjìrɛ̀mwa bɔdu bɔ̀dìa bù.
cat XVIII+kill XVIII+be-good us
'Killing a cat is good for us.' or
'A cat's killing is good for us.'

bùmwì bɔ̀dìa bù.

XVIII+praise XVIII+be-good us

'Praise is good for us.'

àlà bɔṭiyà bɔ̀dìa bù.

things XVIII+learn XVIII+be-good us

'Learning is good for us.'

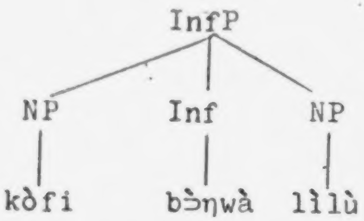
It will be noticed that phrases like

kòfi lìlù bɔ̀ŋwà

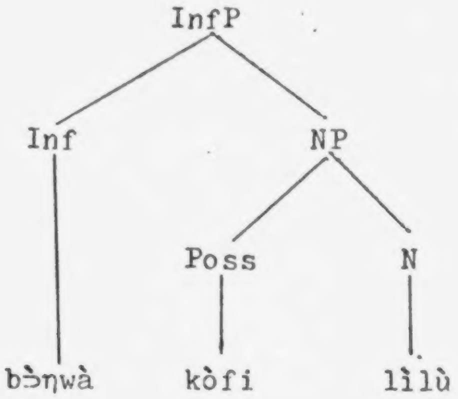
and

àjìrɛ̀mwa bɔdu

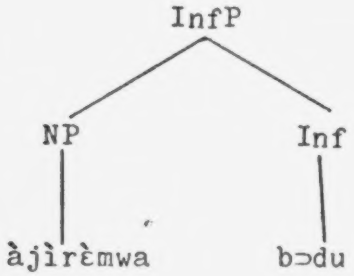
are inherently ambiguous--the first can be translated either as "Kofi's harvesting of yam" or as "the harvesting of Kofi's yam" and the second either as "a cat's killing" or as "the killing of a cat." This ambiguity arises from the same source as the ambiguity possible with derived nouns discussed on pp 140-1 , i.e., whether the underlying structure of kòfi lìlù bɔ̀ŋwà is



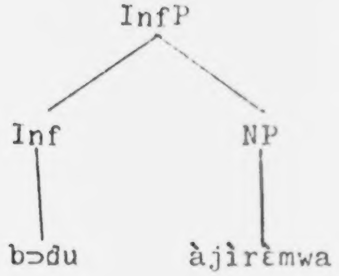
which gives the first interpretation, or whether it is



which yields the second interpretation. Similarly, àjìrɛ̀mwa bɔdu can come either from



which yields the first interpretation, or from



which yields the second interpretation. Phrases like these can be disambiguated only through context.

The Infinitival Phrase as object of a verb. There is a small number of verbs which can take infinitival complements; these verbs, discussed more fully on pp415-6 include

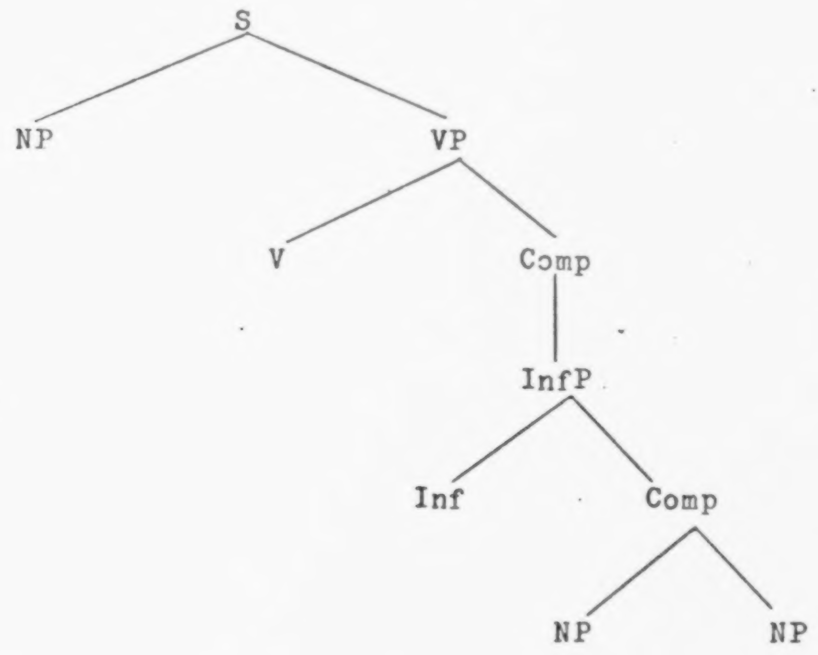
bɔ̀bɔ̀mɔdi	'to try'
bɔkana	'to be able to'
bɔti	'to know'
bɔtiyà	'to learn'
bɔyɔ	'to want'
bɔda ku	'to be in the midst of'.

The infinitival complements to these verbs consist of an Infinitive followed by whatever complements the Verb

Stem of the Infinitive could usually take.

P31 InfP -----) Inf + Comp / [+V, ___ InfP] ___

Sentences whose complements are Infinitival Phrases could have deep structures rather like



and can be exemplified by

i. ɔ̀ɔ̀yɔɔ̀ bùkpì.

3s+PRES+NEG+want Inf+die

'He doesn't want tɔ die.'

where the complement to the Infinitive is ∅ ;

ii. ɔ̀ɔ̀yɔɔ̀ butiyà àlà.

3s+PRES+NEG+want Inf+learn things

'He doesn't want to learn.'

where the complement to the Infinitive is a single noun;

iii. ɔ̀ɔ̀yɔɔ̀ butinà yao àlà.

3s+PRES+NEG+want Inf+teach Yao things

'He doesn't want to teach Yao anything.'

where the complement to the Infinitive is a sequence of two nouns;

iv. ɔ̀ɔ̀yɔɔ̀ butiyà bɔŋwa.

3s+PRES+NEG+want Inf+learn Inf+cook

'She doesn't want to learn how to cook.'

where the complement to the Infinitive is another Infinitival Phrase; and

v. ɔ̀ɔ̀yɔɔ̀ butiyà si ɔkpɛ ɔ́mɔ̀ úkpì lɛ̀dìjɛ̀.

3s+PRES+NEG+want Inf+learn if grasscutter the
3s+PAS+die morning

'She doesn't want to find out if the grasscutter died this morning.'

where the complement to the Infinitive is an embedded

Sentence.

Infinitives used for emphasis. The action of a verb in a main clause can be emphasized by inserting the Infinitive form of the verb immediately before the subject of the verb.

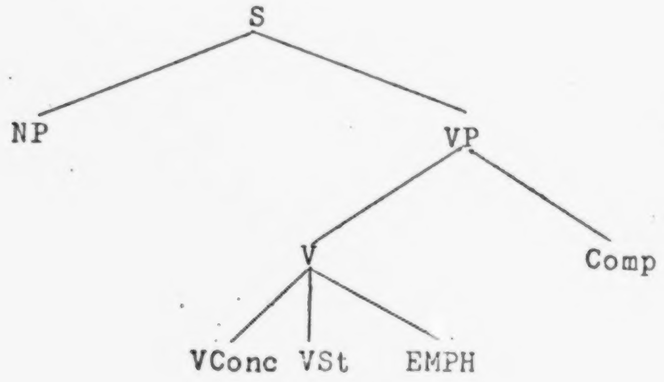
T24 SD: X + NP + VConc + VSt + EMPH + Y

SC: X + XVIII + VSt' + NP + FinP + VSt' + Y

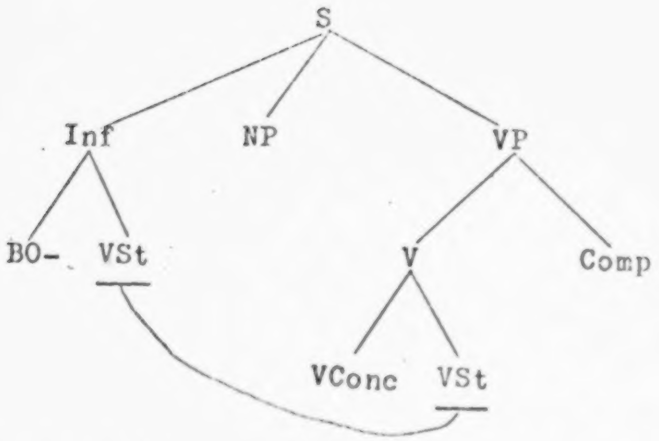
where VConc = Finite Prefixes

X and Y = any strings

That is, an underlying Phrase-marker like



is transformed to a Phrase-marker like



This can be exemplified by:

bɔ̀sì bɔ́sì àsànti kama.

Inf+come-from 1p+PAS+come-from Ashante back

'We came from behind the Ashante land.'

bɔ̀dì lɛ́dì kàmàdì ʊ̀seì.

Inf+eat 1s+PAS+eat yesterday night

'I did eat last night.'

bɔŋwa àjua ɔ̀ɔ̀ŋwa ɔ̀fayī̀.

Inf+cook Adjuah 3s+PRES+cook now

'Adjuah is cooking now.'

bùmwì bèemwì àtibrùku uwi biara.

Inf+praise 3p+PRES+praise God time every

'They are always praising God.'

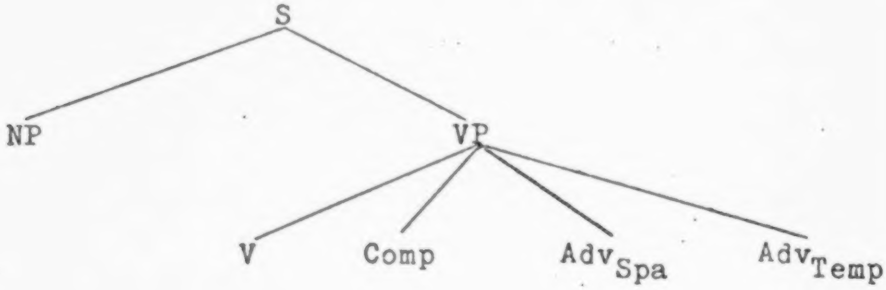
Part V. The Verb Phrase

The Verb Phrase

The Verb Phrase consists of a Verb (V) plus Complement (Comp), followed by optional space or time adverbials (Adv_{Spa}, Adv_{Temp}).

P32 VP -------) V + (Comp) (Adv_{Spa})(Adv_{Temp})

This yields a Phrase-marker like:



The Verb

The Verb consists of a Finite Verb Prefix (FinP) followed by a Verb Stem (VSt):

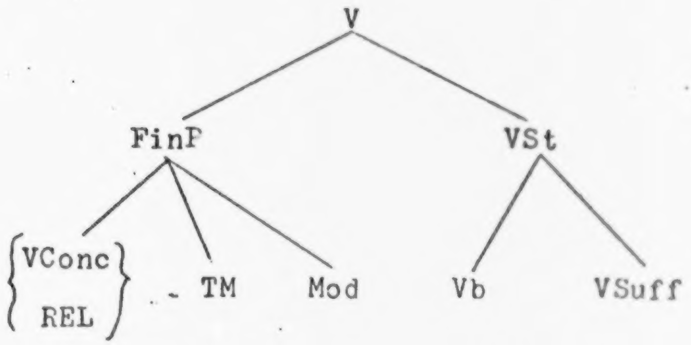
P33 V -------) FinP + VSt

The Finite Verb Prefix consists of either a Verbal Concord marker (VConc) or a Relative marker (REL), followed by a Tense marker (TM), followed by an optional Modality node (Mod); the Verb Stem consists of a Verb Root (Vb) followed in some cases by a Verb Suffix (VSuff).

P34 FinP -----) $\left\{\begin{array}{c}\text{VConc}\\ \text{REL}\end{array}\right\}$ TM (Mod)

P35 VSt ------) Vb (VSuff)

At this stage, a fully-expanded Phrase-marker for a verb is:



Verbal Concord markers. With the exception of verbs in certain types of relative clause or in certain types of purpose clause, all finite verbs must be prefixed by a Verbal Concord marker, which agrees with the subject of the verb in person and number or in Noun Class membership and number.

$$\text{T25}\quad \text{VConc} \longrightarrow \left\{ \begin{array}{l} \begin{bmatrix}1\\2\\3\end{bmatrix} \begin{bmatrix}\text{Sing}\\\text{Plural}\end{bmatrix} \; / \; \begin{bmatrix}1\\2\\3\end{bmatrix} \begin{bmatrix}\text{Sing}\\\text{Plural}\end{bmatrix} \;\underline{\qquad} \\ \qquad \text{Conc} \qquad / \; \left\{\begin{array}{l}\text{Nom}\\\text{InfP}\end{array}\right\} \;\underline{\qquad} \end{array}\right.$$

As the rule states, the Verbal Concord markers used when the subject of the verb is a nominal or an infinitival phrase are the same as the concordial prefixes which mark the concord between a Noun and its modifiers. The Verbal Concord marker which refers to the first person singular has three syntactically conditioned allomorphs, MO- , LE- , and N- ; the Verbal Concord markers for the other persons are as follows:

1 sing	LE-, MO-, N-	1 plural	BO-
2	A-	2	BE-
3	O-	3	BA-

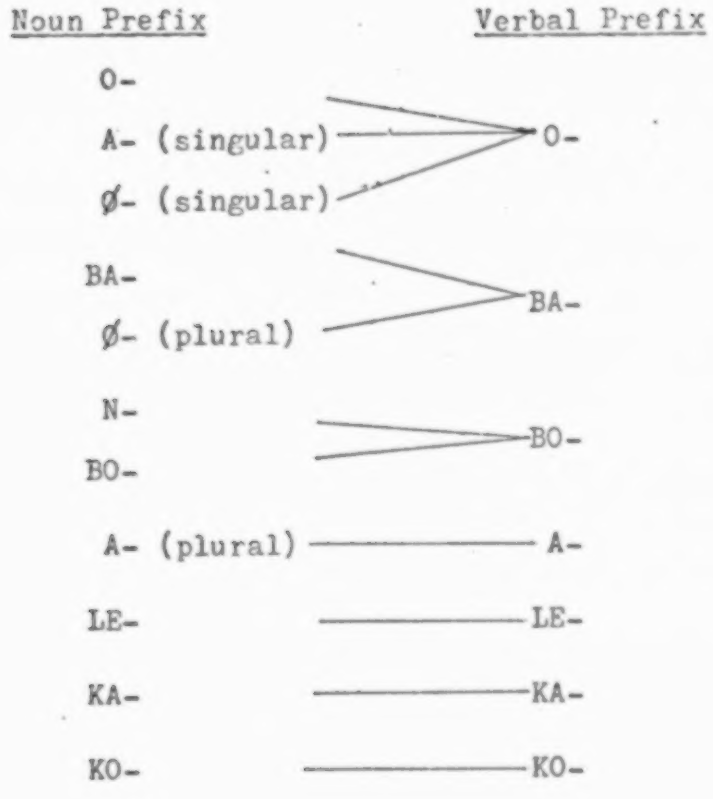


Figure XII

Verbal Concordial Prefixes

$$\text{T26} \quad \begin{bmatrix} 2 & \text{Sing} \\ 3 & \text{Sing} \\ 1 & \text{Plural} \\ 2 & \text{Plural} \\ 3 & \text{Plural} \end{bmatrix} \quad ======) \quad \begin{bmatrix} \text{A-} \\ \text{O-} \\ \text{BO-} \\ \text{BE-} \\ \text{BA-} \end{bmatrix}$$

The Verbal Concord markers are tabulated in Figure XII and can be exemplified by the paradigm for the affirmative present tense of the verb bɔ̀dìa 'to be good'; since the personal pronouns are optional, they have been enclosed in parentheses.

(àmi) ǹdìa.	'I am good.'
(àwo) àdìa.	'You are good.'
(àŋu) ɔ̀dìa.	'He/she/it is good.'
(àbu) bɔ̀dìa.	'We are good.'
(ami) bɛ̀dìa.	'You are good.'
(àma) bàdìa.	'They are good.'
ɔ̀nànà ɔ́mɛ̀ ɔ̀dìa.	'This man is good.'
bànànà bámɛ̀ bàdìa.	'These men are good.'
atu ɔ́mɛ̀ ɔ̀dìa.	'This elephant is good.'
batu bámɛ̀ bàdìa.	'These elephants are good

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ɔtɔ ɔ́mɛ̀ ɔ̀dìa.	'This house is good.'
lɛtɔ lɛ́mɛ̀ lɛ̀dìa.	'These houses are good.'
lɛpa lɛ́mɛ̀ lɛ̀dìa.	'This bat is good.'
bapa bámɛ̀ bàdìa.	'These bats are good.'
lìbwì lɛ́mɛ̀ lɛ̀dìa.	'This pot is good.'
èbwì ámɛ̀ àdìa.	'These pots are good.'
kaji kámɛ̀ kàdìa.	'This monkey is good.'
baji bámɛ̀ bàdìa.	'These monkeys are good.'
kàbwa kámɛ̀ kàdìa.	'This hat is good.'
kɔ̀bwa kɔ́mɛ̀ kɔ̀dìa.	'These hats are good.'
kemo kámɛ̀ kàdìa.	'This farm is good.'
mmo bɔ́mɛ̀ bɔ̀dìa.	'These farms are good.'
kofonù kɔ́mɛ̀ kɔ̀dìa.	'This sheep is good.'
bafonù bámɛ̀ bàdìa.	'These sheep are good.'
kɔdi kɔ́mɛ̀ kɔ̀dìa.	'This cloth is good.'
adi ámɛ̀ àdìa.	'These cloths are good.'
wɛwɛ ɔ́mɛ̀ ɔ̀dìa.	'This dog is good.'
bàwɛwɛ bámɛ̀ bàdìa.	'These dogs are good.'
ntɛ bɔ́mɛ̀ bɔ̀dìa.	'This palm wine is good.'
animì ámɛ̀ àdìa.	'This rice is good.'
lilu lɛ́mɛ̀ lɛ̀dìa.	'This yam is good.' or 'These yams are good.'

kamʊ kámɛ̀ kàdìa.	'This rice is good.'
kutu kɔ́mɛ̀ kɔ̀dìa.	'This soup is good.'
ʊ̀wo ɔ́mɛ̀ ɔ̀dìa.	'This honey is good.'
àlà bɔ̀tina bɔ̀dìa.	'Teaching is good.'

There are certain special concord rules which apply when the subject of the verb consists of a compound noun phrase; these rules are discussed on pp 372 ff

I discuss the formation of the Relative Verb forms on pp 329 ff

Tense markers. There is a five-term tense system with the terms Past (PAS), Present (PRES), Future (FUT), Subjunctive (SUBJ), and Imperative (IMP).

$$\text{P36} \quad \text{TM} \; \text{-----)} \; \left\{ \begin{array}{l} \text{PAS} \\ \text{PRES} \\ \text{FUT} \\ \text{SUBJ} \\ \text{IMP} \end{array} \right.$$

The terms of Past, Present, and Subjunctive are marked tonally and by the form of the first person singular concordial prefix. The Future and Imperative are marked by affixation and by vowel harmony.

Modality markers. There are two types of Modality marker; one type contains the Progressive marker (PROG), which does not alter the vowel harmony characteristics of the verb, and the other type contains the various Aspect markers (ASP), which do alter the verb's vowel harmony pattern (See discussion on pp 66 ff and pp 281 ff). In general, the various Modality markers are restricted to occurrence in particular tenses and, in some cases, to particular verbs: the Progressive marker, for example, can occur only in conjunction with the Past or Present tenses. (Restrictions on the Aspect markers will be discussed on pp 281 ff with the expansion of ASP).

P37 $$\text{Mod} \longrightarrow \left\{ \begin{array}{l} \text{PROG} \;/\; \left\{ \begin{array}{l} \text{PAS}\ \_\_\_ \\ \text{PRES}\ \_\_\_ \end{array} \right. \\ \\ \text{ASP} \end{array} \right.$$

The Verb Root. The Verb Root, like the Noun Stem, consists of a sequence of sounds associated with a Complex Symbol, which states the syntactic and semantic restrictions which govern the use of the verb. The most important of these restrictions are those which control:

i. what subjects and objects the verb can take (discussed under "Complementation"),

ii. what tenses and modality markers the verb can take (discussed on p. 261 and pp. 290 ff), and

iii. what suffixes the verb can take, if any (discussed in the next section).

To anticipate future discussion, Complex Symbols would have the following forms, for example:

bùbɔ̀ [+V, -PRES + PROG ____ , ____ NP] 'to have'
bubɔ [+V, -PRES (PROG) ____ , ____ Place] 'to come'
bɔ̀dà [+V, PRES (PROG) ____ , Anim ____,
- ____Abstract] 'to hold'
bɔdu [+V, -PRES ____ , ____ Anim] 'to kill'
bɔku [+V, ___-I : -PRES ____ , -Abstract ____,
____ ± 'to be dried'; ___-LA :
-PRES ____ , Anim ____, - ____Abstract 'to dry']

bɔti [+V, -PRES + PROG ____, Anim _____,
- ______ ± 'to know'; ____-A :
-PRES ____ , Anim _____Abstract 'to
learn'; _____-NA : -PRES ____,
Anim _____ (Anim NP) 'to show']

buse [+V, -PRES + PROG ____, ____ Adj] 'to be'

where, in accordance with the conventions of Chomsky (1965:111), a feature like [-PRES _____] is to be read as "not occurring in the Simple Present", a feature like [-PRES + PROG _____] is to be read as "not occurring in the Present Progressive", [Anim ____] is to be read as "must have an animate subject", etc. The feature [PRES (PROG)], associated with the verb bɔ̀dà 'to grasp, to hold', is, therefore, a bit of an anomaly since bɔ̀dà can occur in other tenses than just the Simple Present or Present Progressive; given the restrictions on the present tenses of other verbs, it seems useful to ensure that the present tenses for all verbs be fully specified.

Verb Suffixes. Diachronically, five verb suffixes can be identified:

i. -A

bɔ̀dìa	'to be good'
bɔdia	'to be enough'
budie	'to create; to remove'
bufie	'to catch'
bɔhia	'to be important'
bulie	'to be sitting'
bɔ̀pùa	'to be imminent'

ii. -I

bɔkaì	'to remember'
bɔpaì	'to crack'
buveì	'to fly'

iii. -O

bùdùo	'to be full up; to arrive at'
bɔ̀fwìo	'to be mistaken'

iv. -LÀ

bɔdulà	'to vomit'
bɔfwalà	'to pierce a hole'
bɔ̀fwàlà	'to be white'

v. -LI/-MI/-NI

bubimì	'to unfold'
bùbwìlì	'to fall down'
bùdùmi	'to insult'
bɔ̀fɛ̀nì	'to scratch'
bɔlɛmì	'to carry piggy-back'
buŋwɛni	'to write'
buŋwuni	'to become'
bùnyìmì	'to tie'
bɔ̀nyìmì	'to suckle'
bɔvimì	'to peel

Synchronically, however, all these suffixes, with the exception (to be discussed presently) of most instances of -LÀ and a handful of instances of -A and -I , have completely lost whatever morphemic status they may once have had and should be considered as inseparable parts of the Verb Stem.

As for the exceptions:- In my discussion of transitivity, I deal primarily with verbs which have only one morphological form (i.e., in which the Verb Stem and the Verb Root are identical) regardless of whether

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the verb is being used transitively or intransitively. There are, however, some 30 verbs which have one morphological form when they are used intransitively (in some cases, transitively, but with a single object) but a different morphological form when they are being used transitively (in some cases, transitively, but with a double object). The intransitive forms of many of these verbs are suffixed by -A or -I ; the transitive forms, however, are all suffixed by -LΛ̀ .

1a. lɛ̀cami lɛ̀ɛŋwù.
plate LE+PRES+be-dirty
'The plate is dirty.'

b. àbla ɔ̀ɔŋwùnà lɛ̀cami.
Abla 3s+PRES+be-dirty+make plate
'Abla is making the plate dirty.'

2a. kutu kúbìè.
soup KU+PAS+spoil+become
'The soup got spoiled.'

b. àjwa úbìlè kutu.
Ajua 3s+PAS+spoil+make soup
'Ajua spoiled the soup.'

3a.. adi àakùì.
cloths A+PRES+dry+get
'The cloths are drying.'

b. kwàsi ɔ̀ɔkùlà adi.
Kwasi 3s+PRES+dry+make cloths
'Kwasi is drying the cloths.'

4a. ubi ɔ́nì ntu.
baby 3s+PAS+drink water
'The baby drank water.'

b. ɔ́nìnà ubi ntu.
3s+PAS+drink+make baby water
'She made the baby drink water.'

The suffix vowel harmonizes with the verb root (cf. bɔdia 'to be sufficient' and budie 'to remove'), and the consonant of the -LÀ suffix becomes /n/ if there is a nasal consonant in the verb root.

$$\begin{array}{llllllllll} \text{T27} & \text{SD:} & X & + & \multicolumn{2}{c}{\text{Vb}} & + & \multicolumn{2}{c}{\text{VSuff}} & \pm \\ & & & & C & V & & & & \\ & \text{SC:} & X' & + & C & V & + & (L) & A & \pm \\ & & & & [\alpha\text{Nas}] & [\beta\text{Adv}] & & ([\alpha\text{Nas}]) & [\beta\text{Adv}] & \end{array}$$

Following is a list of all paired verbs currently in use in Baglo in which the transitive (or double transitive) member of the pair is suffixed by -LÀ .

bɔbɛ	'to be hidden'	bɔbɛlà	'to hide s.t.'
bùbìè	'to be spoiled'	bùbìlè	'to spoil s.t.'
bɔcui	'to be burnt'	bɔculà	'to burn s.t.'
bɔ̀fà	'to hang down'	bɔ̀fàlà	'to hang s.t.'
bɔ̀fɛ̀	'to blow'	bɔ̀fɛ̀là	'to make s.o. blow'
bujie	'to be red'	bujelè	'to redden'
bɔ̀kùì	'to be dry'	bɔ̀kùlà	'to dry s.t.'
bɔkpɛ	'to be late'	bɔkpɛlà	'to delay'
bɔma	'to be dented'	bɔmanà	'to squash'
bùnè	'to be long'	bùnɛ̀nè	'to lengthen'
bɔni	'to drink'	bɔninà	'to make s.o. drink'
buni	'to be clean, extinguished'	buninè	'to clean, extinguish'
bɔ̀ŋwù	'to be dirty'	bɔ̀ŋwunà	'to make s.t. dirty'
bùnyè	'to stand'	bùnyènè	'to make s.o. stand'
bɔnyi	'to sink'	bɔnyinà	'to sink s.t.'
bɔ̀nyì	'to be adulterated'	bɔ̀nyìnà	'to adulterate s.t.'
bɔ̀sìa	'to follow'	bɔ̀sìàlà	'to send after'

bɔta	'to rise'	bɔtalà	'to raise'
bɔtià	'to learn'	bɔtinà	'to teach'
buti	'to carry'	butilè	'to help s.o. carry'
bɔ̀tɔ̀	'to go ahead'	bɔ̀tɔ̀lɔ̀	'to send ahead'
bɔvià	'to cross s.t.'	bɔviàlà	'to bring s.o. across s.t.'
bɔ̀yì	'to be lóst'	bɔ̀yìlà	'to lose'
bɔyià	!to be afraid'	bɔyɪlà	'to frighten'
bùyù	'to be low'	bùyùlè	'to lower'
bɔ̀lɛ̀	'to sit'	bɔ̀lɛ̀lɛ̀	'to settle'

There are four verbs on this list which especially stand out: bujelè 'to redden', bɔ̀sìàlà 'to send after', bɔtinà 'to teach', and bɔviàlà 'to bring s.o. across s.t.' bujelè stands out because for some reason, unknown to me, the vowel of the intransitive form has been lost; the other three stand out because they seem to form triplets alongside the respective verb roots which can occur without suffixes:

bɔti 'to know' ~ bɔtià 'to learn'
~ bɔtinà 'to teach'

bɔ̀sì 'to be from' ~ bɔ̀sìà 'to follow'
~ bɔ̀sìàlà 'to send after'
bɔvi 'to be across from s.t.' ~
(mùnà ɔtɔ ɔ́vì kɛtu.
'My house is across the river.')
bɔvià 'to cross s.t.' ~
(lɛ́vìà kɛtu.
'I crossed the river.')
bɔviàlà 'to bring s.o. across s.t.'
(lɛ́vìà mùnà èse kɛtu.
'I brought my goat across the river.')

In addition, it may be that the three verbs bɔcùɛ 'to forge (metal)', bɔculà 'to burn s.t.', and bɔcui 'to be burnt' form a triplet. At first blush, one is led to infer that historically the suffix -A may have been some sort of inchoative (which might help to explain why it was retained in the causatives formed with -LÀ), but as yet there is insufficient data to support this.

Verb Paradigms

The Affirmative Simple Past. The Affirmative Simple Past is the affirmative verb tense most frequently used to refer to events that have already occurred; it carries no implication of the duration of the event in question and can be defined operationally as that affirmative verb tense which most frequently occurs in the frame

__________ kàmàdì.
'__________ yesterday.'

Dialectally, there are some tone differences in the formation of the Affirmative Simple Past. In the Baglo dialect, the Affirmative Simple Past is formed as follows: the Verbal Concord marker occurs on a High tone, while all the syllables of the Verb Stem become Low. The Verbal Concord marker harmonizes with the Verb Stem, and the Verbal Concord marker for the first person singular is LÉ- .

T28 SD: VConc + PAS + VSt

$$\text{SC:}\quad \underset{\begin{bmatrix}-\text{Adv}\\ +\text{HiTo}\end{bmatrix}}{\text{VConc}} \quad + \quad \underset{\begin{bmatrix}-\text{Adv}\\ +\text{LoTo}\end{bmatrix}^{*}}{\text{VSt}}$$

(An asterisk following a feature denotes iteration; in the above rule, for example, it indicates that all tones within the Verb Stem are Low, regardless of the total number of tones there are.)

T29 1 + Sing + PAS =====) LÉ-

It will be noticed that the effect of these rules is to make the Affirmative Simple Past tenses of both Mid-tone and Low-tone verbs identical and, therefore, ambiguous in suitable contexts: in the Baglo dialect, the sentence lέŋwà kàmàdì , for example, means either 'I cooked yesterday' or 'I harvested yesterday.'

In general, the paradigms for the verbs bɔdu 'to kill', bɔ̀dù 'to bite', bufwi 'to spit', bùfwì 'to be sick', and bɔtinà 'to teach' will be used as examples. Overleaf are sample paradigms for the Affirmative Simple Past tense.

lɛ́ɗù	I	killed; bit
áɗù	You, A-	
ɔ́ɗù	He, O-	
bɔ́ɗù	We, N, BO-	
bɛ́ɗù	You	
báɗù	They, BA-	
lɛ́ɗù	LE-	
káɗù	KA-	
kɔ́ɗù	KO-	

lífwì	I	spaṭ; were sick
éfwì	You, A-	
úfwì	He, O-	
búfwì	We, N, BO-	
bífwì	You	
béfwì	They, BA-	
lífwì	LE-	
kéfwì	KA-	
kúfwì	KO-	

lɛ́tìnà	I	
átìnà	You, A-	
ɔ́tìnà	He, O-	
bɔ́tìnà	We, N, BO-	
bɛ́tìnà	You	
bátìnà	They, BA-	taught
lɛ́tìnà	LE-	
kátìnà	KA-	
kɔ́tìnà	KO-	

The Affirmative Past Progressive. Like the Affirmative Simple Past, the Affirmative Past Progressive is used to refer to events which have already occurred; unlike the Affirmative Simple Past, however, the Affirmative Past Progressive asserts that the past action has effects continuing til some subsequent time, usually the present. The Affirmative Past Progressive can be defined operationally as occurring in both the frames

__________ ɔ̀fayī̀.

'__________ now.'

and

________ asà nà líbò.

________ before that I+PAS+come

'______ before I came.',

although the Affirmative Past Progressive can not occur in the frame

________ kàmàdì.

'______ yesterday.'

I have noticed no dialectal difference in the formation of the Affirmative Past Progressive, which is formed as follows: the Verbal Concord marker occurs on a High tone, as for the Affirmative Simple Past. The Progressive marker, which is an infixed vowel which copies all the features other than tone of the vowel of the Verbal Concord marker, immediately preceding it, as for the Affirmative Present Progressive, takes the inherent tone of the first syllable of the verb stem, and the inherent tone of the first syllable of the verb stem is spread over the rest of the verb stem. As for the Affirmative Simple Past, the concord form for the first person singular is LÉ- . Vowel harmony applies throughout.

T30

$$\begin{array}{llllllll}
\text{SD:} & \text{VConc} & + & \text{PAS} & + & \text{PROG} & + & \text{VSt}
\end{array}$$

$$\begin{array}{lllllllll}
\text{SC:} & \text{(C)} & \text{V} & + & \text{V} & + & \text{C(C)} & \text{V} & \text{(X)*} \\
 & & \begin{bmatrix} \alpha\text{Adv} \\ \beta\text{High} \\ \gamma\text{Back} \\ +\text{HiTo} \end{bmatrix} & & \begin{bmatrix} \alpha\text{Adv} \\ \beta\text{High} \\ \gamma\text{Back} \\ \delta\text{LoTo} \end{bmatrix} & & & \begin{bmatrix} \alpha\text{Adv} \\ \\ \\ \delta\text{LoTo} \end{bmatrix} & \begin{bmatrix} \alpha\text{Adv} \\ \\ \\ \delta\text{LoTo} \end{bmatrix}
\end{array}$$

The following paradigms will exemplify the Affirmative Past Progressive tense:

bɔdu	'to kill'	
lέεdu	I	have killed
áadu	You, A-	
ɔ́ɔdu	He, O-	
bɔ́ɔdu	We, N, BO-	
bέεdu	You	
báadu	They, BA	
lέεdu	LE-	
káadu	KA-	
kɔ́ɔdu	KO-	

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bɔ̀dɔ̀	'to bite'	
lέὲdù	I	have bitten
áàdù	You, A-	
ɔ́ɔ̀dù	He, O-	
bɔ́ɔ̀dù	We, N, BO-	
bέὲdù	You	
báàdù	They, BA-	
lέὲdù	LE-	
káàdù	KA-	
kɔ́ɔ̀dù	KO-	

bufwi	'to spit'	
líifwi	I	have spit
éefwi	You, A-	
úufwi	He, O-	
búufwi	We, N, BO-	
bíifwi	You	
béefwi	They, BA-	
líifwi	LE-	
kéefwi	KA-	
kúufwi	KO-	

bùfwì	'to be sick'	
líìfwì	I	have been sick
éèfwì	You, A-	
úùfwì	He, O-	
búùfwì	We, N, BO-	
bíìfwì	You	
béèfwì	They	
líìfwì	LE-	
kéèfwì	KA-	
kúùfwì	KO-	

bɔtinà	'to teach'	
lɛ́ɛtina	I	have taught
áatina	You, A-	
ɔ́ɔtina	He, O-	
bɔ́ɔtina	We, N, BO-	
bɛ́ɛtina	You	
báatina	They, BA-	
lɛ́ɛtina	LE-	
káatina	KA-	
kɔ́ɔtina	KO-	

The Affirmative Simple Present. There are only about three dozen verbs, mostly either verbs of state or verbs describing one's physical position, which can be used in the Affirmative Simple Present, that is, which can be used without an accompanying Progressive marker. The following list includes all those Verbs of State which I have so far encountered; significantly missing from this list are most of the verbs of mental activity or of sensation, which generally occur in the present in Buɛm only in the present progressive.

Verbs of State with [-Advanced] Harmony:

ǹca	'I am alive; I am at ___'
nda	'I am holding, grasping'
ndi	'I am a ___'
ǹdìa	'I am good!
ǹfa	'I am squatting'
ŋkɛ	'I am concerned in, involved in'
ŋ̀kwɛni	'I am carrying on my back'
ŋ̀kpɛ	'I am waiting, am in behind'
ǹlɛ	'I am kneeling'

m̀ma	'I am resting on ____'
ǹsìa	'I am following'
ǹsɔ	'I am repeating, againing, alsoing
ǹtɛ	'I am lying down'
ntalɛ̀	'I am untilling (time)'
nti/nji	'I know'
ǹtɔ	'I am in front'
ndia	'I am sufficient'

Verbs of State with [+Advanced] Harmony:

m̀bi	'I am wearing'
m̀bo	'I have'
ŋ̀gbo	'I am leaning against ____'
ŋ̀kɛli	'I am running, moving aroung'
ǹje	'I have hanging from my shoulder'
nlì	'I am sitting'
nnye	'I am standing'
nse	'I am (Adjective) '
ntedù	'I go as far as ____'
nti	'I am carrying, taking, marrying'
ntulò	'I surpass'

The Affirmative Simple Present is formed as follows: the final tone of the verb is Mid, and the penultimate syllable and, where present, prepenultimate syllable of the verb have the same tone as the inherent tone of the first syllable of the Verb Stem; vowel harmony applies throughout.

T31 SD: $$\begin{array}{lllllllll} \text{VConc} & + & \text{PRES} & + & & \text{VSt} & & & \\ & & & & \text{C} & \text{V} & ((\text{C}) & \text{V}) \\ & & & & & [\alpha\text{LoTo}] & & \end{array}$$

SC: $$\begin{array}{lllllll} \text{VConc} & + & & \text{VSt} & & & \\ & & (\text{C} & \text{V} &) & (\text{C}) & \text{V} \\ [\beta\,\text{Adv}] & & & [\beta\text{Adv}] & & & \left[\begin{array}{l} \delta\text{Adv} \\ -\text{HiTo} \\ -\text{LoTo} \end{array}\right] \\ [\alpha\text{LoTo}] & & & [\alpha\text{LoTo}] & & & \end{array}$$

The concordial form for the first person singular is a syllabic nasal N̩- , homorganic with the following consonant.

T32 1 + Singular ====) N̩- / ____ PRES+ VSt

The following paradigms, for the verbs bɔti 'to know', bùbò 'to have', bɔdia 'to be sufficient', and bɔ̀dìa 'to be good', will illustrate the Affirmative Simple Present.

bɔti	'to know'	
nji	I	know
aji	You, A-	
ɔji	He, O-	
bɔȷ̈i	We, N, BO-	
bɛji	You	
baji	They, BA-	
lɛji	LE-	
kaji	KA-	
kɔji	KO-	

bùbɔ̀	'to have'	
m̀bo	I	have
èbo	You, A-	
ùbo	He, O-	
bùbo	We, N, BO-	
bìbo	You	
bèbo	They, BA-	
lìbo	LE-	
kèbo	KA-	
kùbo	KO-	

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bɔdia	'to be sufficient'	
ndia	I	suffice
adia	You, A-	
ɔdia	He, O-	
bɔdia	We, N, BO-	
bɛdia	You	
badia	They, BA-	
lɛdia	LE-	
kadia	KA-	
kɔdia	KO-	

bɔ̀dìa	'to be good'	
ǹdìa	I	are good
àdìa	You, A-	
ɔ̀dìa	He, O-	
bɔ̀dìa	We, N, BO-	
bɛ̀dìa	You	
bàdìa	They, BA-	
lɛ̀dìa	LE-	
kàdìa	KA-	
kɔ̀dìa	KO-	

There are three verbs which are exceptions to the tonal section of the preceding rules, however; the final tones of the verbs bɔtalɛ̀ 'to until', butedù 'to until', and butulò 'to surpass' are all Low in the Affirmative Simple Present. In the case of the first two, the reason may be that these may actually be forms of the verbs bɔ̀lɛ̀ 'to sit, be well' and bùdù 'to arrive', both marked with the egressive marker -TA- ; no explanation comes to mind immediately for butulò other than that -lò is a suffix.

It should be noted that there are a number of verbs among the thirty which can occur in the Affirmative Simple Present which can also occur in the Affirmative Present Progressive, depending on whether the action involved is considered as being momentary or habitual: if the action is considered as being essentially momentary, i.e., if a frame like

______ ɔ̀fayĩ̀.
'______ now.'

is appropriate, then the simple present must be used:

ǹda kɔdi ɔ̀fayĩ̀. 'I'm holding a cloth now.'

If the action is considered as being essentially habitual, however, i.e., if a frame like

_______ uwi biala.
'_______ all the time.'

is appropriate, then the present progressive must be used:

mɔ̀ɔ̀da kɔdi uwi biala. 'I always hold a cloth.'

The Affirmative Present Progressive. Most verbs can occur in the present only when they are marked with the Progressive marker; this applies whether the action of the verb is considered as being momentary or whether it is considered as being habitual. The Affirmative Present Progressive is formed as follows: the tone of the concordial prefix is Low, the Progressive marker is an infixed vowel which copies all the features other than tone of the vowel, immediately preceding it, of the concordial marker and which has a tone Mid or Low opposite the inherent tone of the final syllable of the Verb Stem, and the Verb Stem retains its inherent tone. Vowel harmony applies throughout.

T33

SD: VConc + PRES + PROG + VSt

$$\text{SC:}\quad (C)\ \underset{\begin{bmatrix}\alpha\text{Adv}\\ \beta\text{High}\\ \gamma\text{Back}\\ +\text{LoTo}\end{bmatrix}}{V} \ +\ \underset{\begin{bmatrix}\alpha\text{Adv}\\ \beta\text{High}\\ \gamma\text{Back}\\ -\delta\text{LoTo}\end{bmatrix}}{V} \ +\ \underset{[-\alpha\text{Adv}]}{(X)^{*}}\quad (C)\ \underset{\begin{array}{c}[-\alpha\text{Adv}]\\ \\ \\ [\delta\text{LoTo}]\end{array}}{V}$$

The concord form for the first person singular person is MO- .

T34 1 + Singular ====) MO- / ___ PRES + PROG + VSt

The following paradigms will exemplify the Affirmative Present Progressive tense.

bɔdu	'to kill'	
mɔ̀ɔ̀du	I	
ààdu	You, A-	
ɔ̀ɔ̀du	He, O-	
bɔ̀ɔ̀du	We, N, BO-	
bɛ̀ɛ̀du	You	are killing'
bààdu	They, BA-	
lɛ̀ɛ̀du	LE-	
kààdu	KA-	
kɔ̀ɔ̀du	KO-	

bɔ̀dù	'to bite'	
mɔ̀ɔdù	I	
ààdù	You, A-	
ɔ̀ɔdù	He, O-	
bɔ̀ɔdù	We, N, BO-	
bɛ̀ɛdù	You	are biting
bàadù	They, BA-	
lɛ̀ɛdù	LE-	
kàadù	KA-	
kɔ̀ɔdù	KO-	

bufwi	'to spit'	
mùùfwi	I	
èèfwi	You, A-	
ùùfwi	He, O-	
bùùfwi	We, N, BO-	
bììfwi	You	are spitting
bèèfwi	They, BA-	
lììfwi	LE-	
kèèfwi	KA-	
kùùfwi	KO-	

bùfwì	'to be sick'	
mùufwì	I	are sick
èèfwì	Yɔu, A-	
ùufwì	He, O-	
bùufwì	We, N, BO-	
bìifwì	You	
bèefwì	They, BA-	
lìifwì	LE-	
kèefwì	KA-	
kùufwì	KO-	

bɔtinà	'to teach'	
mɔ̀ɔtinà	I	are teaching
àatinà	Yɔu, A-	
ɔ̀ɔtinà	He, O-	
bɔ̀ɔtinà	We, N, BO-	
bɛ̀ɛtinà	You	
bàatinà	They	
lɛ̀ɛtinà	LE-	
kàatinà	KA-	
kɔ̀ɔtinà	KO-	

The Affirmative Simple Subjunctive. In a main clause, the Subjunctive is used to express the desire that an event occur, without necessarily implying that the event actually will occur.

fùlà lɛga kadikɔ̀ kèbo.
thy law "eating"-place KA+SUBJ+come
'Thy Kingdom come.'

The Subjunctive is used much more frequently, however, following certain verbs of mental activity or which express necessity, desirability, etc.

mɔbɔ̀mɔdi lìtiyà lɛ̀lɛ̀mì lɛdi.
1s+PRES+try 1s+SUBJ+learn Lɛlɛmi language
'I'm trying to learn the Lɛlɛmi language.'

yàà ɔ̀blà kutu.
IMP+let 3s+SUBJ+make soup
'Let her cook soup.'

ɔ́hìà ka bàdù ɔ̀kwaduɔ̀.
3s+PRES+be-important that 3p+SUBJ+kill bush-cow
'It's important that they kill a bush-cow.'

m̀ɔ̀yɔ ka ɛ̀bɔ.
1s+PRES+want that 2s+SUBJ+come
'I want you to come.'

The Affirmative Simple Subjunctive is formed as follows: the verbal concordial marker is on a Low tone. If the Verb Stem is monosyllabic, then its tone Low or Mid opposite to its inherent tone; if the Verb Stem is polysyllabic, then it seems that it retains its inherent tone. Vowel harmony applies throughout.

$$\text{T35}\quad \text{SD:}\quad \text{VConc} + \text{SUBJ} + \text{C(C)}\ \underset{\left[\alpha\text{LoTo}\right]}{\text{V}}$$

$$\text{SC:}\quad \underset{\begin{bmatrix}\beta\text{Adv}\\ +\text{LoTo}\end{bmatrix}}{\text{VConc}} + \underset{\begin{bmatrix}\beta\text{Adv}\\ -\alpha\text{LoTo}\end{bmatrix}}{\text{C(C)}\ \text{V}}$$

$$\text{T36}\quad \text{SD:}\quad \text{VConc} + \text{SUBJ} + \text{C(C) V X*}$$

$$\text{SC:}\quad \underset{\begin{bmatrix}\alpha\text{Adv}\\ +\text{LoTo}\end{bmatrix}}{\text{VConc}} + \underset{\left[\alpha\text{Adv}\right]}{\text{C(C) V X*}}$$

The verbal concordial marker for the first person singular is LÈ- .

T37 1 + Singular =====) LÈ- / ____ SUBJ

The paradigms overleaf will illustrate the Affirmative Simple Subjunctive.

bɔdu	'to kill'	
lɛ̀dù	I	
àdù	You, A-	
ɔ̀dù	He, O-	
bɔ̀dù	We, N, BO-	
bɛ̀dù	You	should kill
bàdù	They, BA-	
lɛ̀dù	LE-	
kàdù	KA-	
kɔ̀dù	KO-	

bɔ̀dù	'to bite'	
lɛ̀du	I	
àdu	You, A-	
ɔ̀du	He, O-	
bɔ̀du	We, N, BO-	
bɛ̀du	You	should bite
bàdu	They, BA-	
lɛ̀du	LE-	
kàdu	KA-	
kɔ̀du	KO-	

bufwi	'to spit'	
lìfwì	I	should spit
èfwì	You, A-	
ùfwì	He, O-	
bùfwì	We, N, BO-	
bìfwì	You	
bèfwì	They, BA-	
lìfwì	LE-	
kèfwì	KA-	
kùfwì	KO-	

bùfwì	'to be sick'	
lìfwi	I	should be sick
èfwi	You, A-	
ùfwi	He, O-	
bùfwi	We, N, BO-	
bìfwi	You	
bèfwi	They, BA-	
lìfwi	LE-	
kèfwi	KA-	
kùfwi	KO-	

bɔtinà	'to teach'	
lɛ̀tinà	I	should teach
àtinà	You, A-	
ɔ̀tinà	He, O-	
bɔ̀tinà	We, N, BO-	
bɛ̀tinà	You	
bàtinà	They, BA-	
lɛ̀tinà	LE-	
kàtinà	KA-	
kɔ̀tinà	KO-	

The Affirmative Simple Future. The Affirmative Simple Future implies only that the event described will occur at some time in the future, without any implication either of certainty or of motion. There are several forms used to express the Affirmative Simple Future; one of these forms seems to be rather more formal than the others, which can vary freely, even within a single ideolect. The more formal variants can be exemplified (in the third person singular) by:

ɔ̀lubò bɔ̀du. ɔ̀dubò bɔ̀du.	'He will kill.'
ɔ̀lubò bɔ̀dù. ɔ̀dubò bɔ̀dù.	'He will bite.'
ɔ̀lubò bùfwi. ɔ̀dubò bùfwi.	'He will spit.'
ɔ̀lubò bùfwì. ɔ̀dubò bùfwì.	'He will be sick.'
ɔ̀lubò bɔtinà. ɔ̀dubò bɔ̀tinà.	'He will teach.'

where the first morpheme of the first words, ɔ̀- , is the third person singular prefix, the second morpheme, -lu- or -du- , is the marker for the Affirmative Simple Future, and the final morpheme of the first words, -bò , is presumably the Verb Stem for the verb bùbò 'to come'; the second words are infinitives. The origin of the morpheme -lu- or -du- is conjectural; Höftmann (1971:51n) suggests that it is derived (diachronically) from the Verb Stem -du 'reach, arrive'; however, synchronically, the verb budu has the wrong vowel harmony pattern. The alternation between /l/ and

/d/ is presumably an archaic holdover, somewhat parallel to the alternation between /l/ and /d/ in certain morphemes in the Bala dialect of Likpe (sɛkpɛlɛ), which is quite closely related.

The informal variants are essentially reductions of the formal variants just given; for reasons of economy, only the reduced forms of ɔ̀lubɔ̀ bɔ̀dù and ɔ̀lubɔ̀ bùfwì will be given. In order of presumed reduction, these are

ɔ̀lubɔ̀dù	'He will bite.'
ɔ̀luɔ̀dù	
ɔ̀lɔɔ̀dù	
ɔ̀lubùfwì	'He will be sick.'
ɔ̀luùfwì	

with the loss first of the -bɔ̀ of ɔ̀lubɔ̀ , followed by the loss of the /b/ of the infinitival prefix, followed, in the case of ɔ̀lɔɔ̀dù , by the regressive assimilation of the vowel. It shall have been noticed that whether the Verb Stem has the [+Advanced] vowel harmony or the [-Advanced] vowel harmony, the verbal concordial prefix has the [-Advanced] harmony. The rule overleaf will describe the formation of the second of the reduced forms of the Affirmative Simple Future.

$$\begin{array}{llcccccc} \text{T38} & \text{SD:} & \text{VConc} & + & \text{FUT} & + & \text{VSt} \\ & \text{SC:} & \text{VConc} & + & \text{LÚÒ} & + & \text{VSt} \\ & & \begin{bmatrix}\text{-Adv} \\ \text{+LoTo}\end{bmatrix} & & \begin{bmatrix}\alpha\text{Adv}\end{bmatrix} & & \begin{bmatrix}-\alpha\text{Adv}\end{bmatrix} \end{array}$$

The concordial form for the first person singular is n- , to which the /l/ of -LÚÒ- assimilates.

T39 1 + Singular + LÚÒ =====) ǹnuÒ

The following paradigms will illustrate this informal variant of the Affirmative Simple Future.

bɔdu	'to kill'	
ǹnuɔ̀du	I	will kill
àluɔ̀du	You, A-	
ɔ̀luɔ̀du	He, O-	
bɔ̀luɔ̀du	We, N, BO-	
bɛ̀luɔ̀du	You	
bàluɔ̀du	They, BA-	
lɛ̀luɔ̀du	LE-	
kàluɔ̀du	KA-	
kɔ̀luɔ̀du	KO-	

bɔ̀dù	'to bite'	
ǹnuɔ̀dù	I	will bite
àluɔ̀dù	You, A-	
ɔ̀luɔ̀dù	He, O-	
bɔ̀luɔ̀dù	We, N, BO-	
bɛ̀luɔ̀dù	You	
bàluɔ̀dù	They, BA-	
lɛ̀luɔ̀dù	LE-	
kàluɔ̀dù	KA-	
kɔ̀luɔ̀dù	KO-	

bufwi	'to spit'	
ǹnuùfwi	I	will spit
àluùfwi	You, A-	
ɔ̀luùfwi	He, O-	
bɔ̀luùfwi	We, N, BO-	
bɛ̀luùfwi	You	
bàluùfwi	They, BA-	
lɛ̀luùfwi	LE-	
kàluùfwi	KA-	
kɔ̀luùfwi	KO-	

bùfwì	'to be sick'	
ǹnuùfwì	I	will be sick
àluùfwì	You, A-	
ɔ̀luùfwì	He, O-	
bɔ̀luùfwì	We, N, BO-	
bɛ̀luùfwì	You	
bàluùfwì	They, BA-	
lɛ̀luùfwì	LE-	
kàluùfwì	KA-	
kɔ̀luùfwì	KO-	

bɔtinà	'to teach'	
ǹnuɔ̀tinà	I	will teach
àluɔ̀tinà	You, A-	
ɔ̀luɔ̀tinà	He, O-	
bɔ̀luɔ̀tinà	We, N, BO-	
bɛ̀luɔ̀tinà	You	
bàluɔ̀tinà	They, BA-	
lɛ̀luɔ̀tinà	LE-	
kàluɔ̀tinà	KA-	
kɔ̀luɔ̀tinà	KO-	

Verbs marked for Aspect. There is a five term Aspect system, with the terms:

i. Negation (NEG),
ii. Certainty (CERT),
iii. Customary action (CUST),
iv. Motion away from the speaker (GO), and
v. Motion towards the speaker (COME).

Some of these Aspects are mutually exclusive, and two can appear only in certain tenses. In addition, the aspect of Negation has three different allomorphs, depending on tense.

$$\text{P38} \quad \text{ASP} \dashrightarrow \left\{ \begin{array}{c} (\text{NEG})(\text{CUST/PAS}\_\_\_) \\ (\text{CERT/FUT}\_\_\_) \end{array} \right\} \left\{ \begin{array}{c} (\text{GO}) \\ (\text{COME}) \end{array} \right\}$$

All Aspect markers have in common the fact that they alter the vowel harmony patterning of the Verb Prefix, as discussed on pp 66 ff ; to recapitulate, when followed by an Aspect marker, Verbal Prefixes with Non-Low vowels (i.e., O-, LE- , BO- , and KO-) must occur in their [+Advanced] forms; the normal vowel harmony rules apply, however, when the Verbal Prefix contains a Non-High vowel (i.e., A- , BA- , and KA-).

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Certainty. As stated, the aspect of Certainty can occur only with the Future; in main clauses, it is used primarily to indicate that the speaker feels that an event will inevitably take place.

ùàti nà nȁày ɔɔ̀ ŋwà kàlàla.
3s+FUT+CERT+know that 1s+PRES+NEG+like his mischie
'He'll certainly know that I don't like his mischief.'

àtiblùku ùàtɛ bècwiri fwiì.
God 3s+FUT+CERT+judge men all
'God will judge all men.'

bèkpidi bàacà kɔcà.
evil-doers 3p+FUT+CERT+catch shame
'The wicked will certainly be shamed.'

biesè ɔma ɔ́mwì.
1p+FUT+CERT+go town today
'We will definitely go home today.'

The Certainty aspect also occurs quite frequently in future conditionals.

sì bìèye animì ni, àkɔsùà ɔ̀luɔ̀ŋwà.
if 1p+FUT+CERT+buy rice , Akɔsuah 3s+FUT+cook
'If we buy rice, Akosuah will cook it.'

The Future Certain is formed as follows: the Verbal Concordial Prefix and the Certainty marker -A- have tones Mid or Low opposite to the inherent tone of the first syllable of the Verb Stem; the Verb Stem retains its inherent tone. The Concordial Prefix harmonizes according to the rules of reduced vowel harmony, while the Certainty marker harmonizes with the Verb Stem.

$$\begin{array}{llcccccccc}
\text{T40} & \text{SD:} & \text{VConc} & + & \text{FUT} & + & \text{CERT} & + & \text{VSt} & \\
 & \text{SC:} & \text{VConc} & + & \text{-A-} & + & \text{C(C)} & \text{V} & \text{X*} & \\
 & & \begin{bmatrix}\alpha\text{Adv}\\ -\alpha\text{Low}\\ -\gamma\text{LoTo}\end{bmatrix} & & \begin{matrix}[\beta\text{Adv}]\\ \\ [-\gamma\text{LoTo}]\end{matrix} & & & \begin{matrix}[\beta\text{Adv}]\\ \\ [\gamma\text{LoTo}]\end{matrix} & &
\end{array}$$

The Verbal Concordial prefix for the first person singular is m- .

T41 1 + Singular =====) m- / ____ FUT + CERT

The paradigms overleaf will exemplify the Future Certain.

bɔdu	'to kill'	
m̀àdu	I	shall kill
ààdu	You, A-	
ùàdu	He, O-	
bùàdu	We, N, BO-	
bìàdu	You	
bààdu	They, BA-	
lìàdu	LE-	
kààdu	KA-	
kùàdu	KO-	

bɔ̀dù	'to bite'	
madù	I	shall bite
aadù	You, A-	
uadù	He, O-	
buadù	We, N, BO-	
biadù	You	
baadù	They, BA-	
liadù	LE-	
kaadù	KA-	
kuadù	KO-	

bufwi	'to spit'	
mèfwi	I	
èèfwi	You, A-	
ùèfwi	He, O-	
bùèfwi	We, N, BO-	
bìèfwi	You	shall spit
bèèfwi	They, BA-	
lìèfwi	LE-	
kèèfwi	KA-	
kùèfwi	KO-	

bùfwì	'to be sick'	
mefwì	I	
eefwì	You, A-	
uefwì	He, O-	
buefwì	We, N, BO-	
biefwì	You	shall sicken
beefwì	They, BA-	
liefwì	LE-	
keefwì	KA-	
kùefwì	KO-	

bɔtinà	'to teach'	
m̀àtinà	I	
ààtinà	You, A-	
ùàtinà	He, O-	
bùàtinà	We, N, BO-	
bìàtinà	You	shall teach
bààtinà	They, BA-	
lìàtinà	LE-	
kààtinà	KA-	
kùàtinà	KO-	

Customary action. The aspect of Customary action can occur only with the Past or in certain serial verbal constructions; the aspect of Customary action is marked by -'TÀA- and can be described by the following rule:

```
T42   SD:   VConc     +   PAS             +   CUST    +   VSt
      SC:   VConc     +   -TA      A -    +   C(C)        V      X*
           [ αAdv ]      [βAdv][γAdv]                   [βAdv]
           [-αLow ]
           [ +HiTo]      [+LoTo][αLoTo]                 [γLoTo]
```

in which the Verbal Concordial Prefix is on a High tone, the first syllable of the Customary action infix is on a Low tone, and the second syllable of the Customary action infix is on the same tone as the first syllable of the Verb Stem. The first person singular concord form is ń- .

T43 1 + Singular =====) ń- / ____ PAS + CUST

The following paradigms will illustrate the Customary Past.

bɔdu	'to kill'	
ńtàadu	I	used to kill
átàadu	You, A-	
útàadu	He, O-	
bútàadu	We, N, BO-	
bítàadu	You	
bátàadu	They, BA-	
lítàadu	LE-	
kátàadu	KA-	
kútàadu	KO-	

bɔ̀dù	'to bite'	
ńtààdù	I	
átààdù	You, A-	used to bite
útààdù	He, O-	
bútààdù	We, N, BO-	
bítààdù	You	
bátààdù	They, BA-	
lítààdù	LE-	
kátààdù	KA-	
kútààdù	KO-	

bufwi	'to spit'	
ńtèèfwi	I	used to spit
étèefwi	You, A-	
útèefwi	He, O-	
bútèefwi	We, N, BO-	
bítèefwi	You	
bétèefwi	They, BA-	
lítèefwi	LE-	
kétèefwi	KA-	
kútèefwi	KO-	

bùfwì	'to be sick'	
ńtèèfwì	I	used to be sick
étèèfwì	You, A-	
útèèfwì	He, O-	
bútèèfwì	We, N, BO-	
bítèèfwì	You	
bétèèfwì	They, BA-	
lítèèfwì	LE-	
kétèèfwì	KA-	
kútèèfwì	KO-	

bɔtinà	'to teach'	
ńtàatinà	I	used to teach
átàatinà	You, A-	
útàatinà	He, O-	
bútàatinà	We, N, BO-	
bítàatinà	You	
bátàatinà	They, BA-	
lítàatinà	LE-	
kátàatinà	KA-	
kútàatinà	KO-	

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Motion away from the speaker. Apart from the aspect of Negation, the most commonly used aspect marker is that of motion away from speaker, - T̀Á- , which can be used with virtually any verb and which asserts that the agent of the action of the verb will move away from the speaker in the course of performing the action. When the verb containing this "Go-itive" is not marked by any other aspect marker, all tense distinctions other than that of the Imperative and, for the first person singular, the Subjunctive, fall together. The Affirmative Go-itive is formed as follows: the Verbal Concordial Prefix is on a Low tone and is subject to the reduced vowel harmony. The infixed syllable, TÁ , is on a High tone and harmonizes with the Verb Stem, which retains its inherent tone.

$$\begin{array}{llccccccc} \text{T44} & \text{SD:} & \text{VConc} & + & \text{TM} & + & \text{CO} & + & \text{VSt} \\ & \text{SC:} & \text{VConc} & + & \text{T\'{A}} & + & \text{VSt} & & \\ & & \begin{bmatrix} -\alpha\text{Adv} \\ -\alpha\text{Low} \\ +\text{LoTo} \end{bmatrix} & & \begin{bmatrix} \beta\text{Adv} \end{bmatrix} & & \begin{bmatrix} \beta\text{Adv} \end{bmatrix} & & \\ & & & & \begin{bmatrix} +\text{HiTo} \end{bmatrix} & & & & \end{array}$$

The first person singular concordial prefix is lì- before the Subjunctive; otherwise, it is ǹ- .

T45

$$1 + \text{Sing} \quad \text{=====)} \quad \begin{cases} \text{lì-} \quad / \quad \underline{\qquad} \quad \text{SUBJ} + \text{GO} \\ \text{ǹ-} \quad / \quad \underline{\qquad} \quad \text{PAS, PREC, FUT} + \text{GO} \end{cases}$$

My discussion of the Negative will include a discussion of the Negative of the motion markers; because of their relatively rare occurrence, I can make no claims as to the behavior of the motion markers with aspect markers other than the Negative.

The following paradigms will exemplify the Affirmative Co-itive.

bɔdu	'to kill'	
ǹtádu	I	are going (away) to kill
àtádu	You, A-	
ùtádu	He, O-	
bùtádu	We, N, BO-	
bìtádu	You	
bàtádu	They, BA-	
lìtádu	LE-	
kàtádu	KA-	
kùtádu	KO-	

bɔ̀dù	'to bite'	
ǹtádù	I	are going (away) to bite
àtádù	You, A-	
ùtádù	He, O-	
bùtádù	We, N, BO-	
bìtádù	You	
bàtádù	They, BA-	
lìtádù	LE-	
kàtádù	KA-	
kùtádù	KO-	

bufwi	'to spit'	
ǹtéfwi	I	are going (away) to spit
ètéfwi	You, A-	
ùtéfwi	He, O-	
bùtéfwi	We, N, BO-	
bìtéfwì	You	
bètéfwi	They, BA-	
lìtéfwi	LE-	
kètéfwi	KA-	
kùtéfwi	KO-	

bùfwì	'to be sick'	
ǹtéfwì	I	are going (away) to be sick
ètéfwì	You, A-	
ùtéfwì	He, O-	
bùtéfwì	We, N, BO-	
bìtéfwì	You	
bètéfwì	They, BA-	
lìtéfwì	LE-	
kètéfwì	KA-	
kùtéfwì	KO-	

bɔtinà	'to teach'	
ǹtátinà	I	are going (away) to teach
àtátinà	You, A-	
ùtátinà	He, O-	
bùtátinà	We, N, BO-	
bìtátinà	You	
bàtátinà	They, BA-	
lìtátinà	LE-	
kàtátinà	KA-	
kùtátinà	KO-	

Motion towards the speaker. The other motion marker, -B̀A̍-, is used to denote either motion towards the speaker or lack of motion on the part of the agent of the action of the verb. In all other respects, save one, this "Come-itive" functions like the "Go-itive"; the respect in which it differs is that the "Come-itive" does not co-occur with the Imperative.

The Affirmative Come-itive is formed as follows: the Verbal Concordial Prefix is on a Low tone and is subject to the reduced vowel harmony; the infixed syllable, -BA̍-, is on a Mid tone and harmonizes with the Verb Stem, which retains its inherent tones.

$$\begin{array}{lllllllll} \text{T46} & \text{SD:} & \text{VConc} & + & \text{TM} & + & \text{COME} & + & \text{VSt} \\ & \text{SC:} & \text{VConc} & + & \text{BA} & + & \text{VSt} & & \\ & & \begin{bmatrix} \alpha\text{Adv} \\ -\alpha\text{Low} \\ +\text{LoTo} \end{bmatrix} & & \begin{bmatrix} \beta\text{Adv} \\ -\text{HiTo} \\ -\text{LoTo} \end{bmatrix} & & \begin{bmatrix} \beta\text{Adv} \end{bmatrix} & & \end{array}$$

The concordial prefix for the first person singular is lì- for the Subjunctive Come-itive and m̀- for other tenses. Optionally, the /b/ of the infix assimilates to the m̀- .

T47

$$1 + \text{Sing} \Longrightarrow \begin{cases} \text{lì-} \ / \ \_\_\_ \ \text{SUBJ + COME} \\ \text{m̀-} \ / \ \_\_\_ \ \{\text{PAS, PRES, FUT}\} \\ \qquad\qquad\quad + \ \text{COME} \end{cases}$$

T48 m̀ba $\xRightarrow{\text{opt}}$ m̀ma

The Affirmative Come-itive is exemplified by the following paradigms.

bɔdu	'to kill'	
m̀madu	I	are coming to kill
àbadu	You, A-	
ùbadu	He, O-	
bùbadu	We, N, BO-	
bìbadu	You	
bàbadu	They, BA-	
lìbadu	LE-	
kàbadu	KA-	
kùbadu	KO-	

bɔ̀dù	'to bite'	
m̀madù	I	are coming to bite
àbadù	You, A-	
ùbadù	He, O-	
bùbadù	We, N, BO-	
bìbadù	You	
bàbadù	They, BA-	
lìbadù	LE-	
kàbadù	KA-	
kùbadù	KO-	

bufwi	'to spit'	
m̀mefwi	I	are coming to spit
èbefwi	You, A-	
ùbefwi	He, O-	
bùbefwi	We, N, BO-	
bìbefwi	You	
bèbefwi	They, BA-	
lìbefwi	LE-	
kèbefwi	KA-	
kùbefwi	KO-	

bùfwì	'to be sick'	
m̀mefwì	I	
èbefwì	You, A-	
ùbefwì	He, O-	
bùbefwì	We, N, BO-	
bìbefwì	You	are coming
bèbefwì	They, BA-	to be sick
lìbefwì	LE-	
kèbefwì	KA-	
kùbefwì	KO-	

bɔtinà	'to teach'	
m̀matinà	I	
àbatinà	You, A-	
ùbatinà	He, O-	
bùbatinà	We, N, BO-	
bìbatinà	You	are coming
bàbatinà	They, BA-	to teach
lìbatinà	LE-	
kàbatinà	KA-	
kùbatinà	KO-	

Negation. There are three allomorphs, conditioned by tense, which are used to signal the negation of a verb:

i. $-\grave{V}-$, which is used to negate the Present tense of verbs which have no Present Progressive form,

ii. -LA- , which is used to negate the Future tense of all verbs and the Present tense of verbs which do have a Present Progressive form, and

iii. -TA- , which is used to negate every other tense (i.e., Past, Subjunctive, and Imperative.

P39

$$\text{NEG} \text{ ------)} \begin{cases} -\grave{\text{V}}- \;/\; \text{PRES} \;\_\_\_\_\; [+\text{V}, -\text{PRES} + \text{PROG} \;\_\_\_\_ \\ -\text{LA}- \;/ \begin{cases} \text{FUT} \;\_\_\_ \\ \text{PRES} \;\_\_\_\_\; [+\text{V}, -\text{PRES} \;\_\_\_\_] \end{cases} \\ -\text{TA}- \end{cases}$$

Both -TA- and -LA- entail that the Verbal Concordial Prefix show the reduced vowel harmony already discussed; the full vowel harmony system, however, applies when the verb is negated by $-\grave{V}-$.

The Negative Past. The Negative Past is the negative equivalent of both the Affirmative Simple Past and the Affirmative Past Progressive; however, if the speaker wishes to form an exact negative equivalent of the Affirmative Past Progressive, the Negative Past is often modified by the adverb tɔ 'yet'.

ɔ́blà kutu.	'She made soup.'
útáblà kutu.	'She didn't make soup.'
ɔ́ɔbla kutu.	'She has made soup.'
útábla tɔ kutu.	'She hasn't made soup yet.'

The Negative Past is formed as follows: both the prefix and the -TA- infix are on High tones, while the Verb Stem retains its inherent tones. As just stated, the prefix is subject to reduced harmony, and the verbal concordial prefix for the first person singular is ń- .

```
T49   SD:   VConc   +   PAS    +   TA   +   VSt
      SC:   VConc   +   TÁ     +   VSt
           [ αAdv ]   [βAdv ]   [βAdv]
           [-αLow ]
           [ +HiTo]   [+HiTo]

T50   1  +  Singular  =====)  ń-  /  ___ PAS + NEG + VSt
```

bɔdu	'to kill'	
ńtádu	I	didn't kill, haven't killed
átádu	You, A-	
útádu	He, O-	
bútádu	We, N, BO-	
bítádu	You	
bátádu	They, BA-	
lítádu	LE-	
kátádu	KA-	
kútádu	KO-	

bɔ̀dù	'to bite'	
ńtádù	I	didn't bite, haven't bitten
átádù	Yɔu, A-	
útádù	He, O-	
bútádù	We, N, BO-	
bítádù	You	
bátádù	They, BA-	
lítádù	LE-	
kátádù	KA-	
kútádù	KO-	

bufwi	'to spit'	
ńtéfwi	I	didn't spit, haven't spit
étéfwi	You, A-	
útéfwi	He, O-	
bútéfwi	We, N, BO-	
bítéfwi	You	
bétéfwi	They, BA-	
lítéfwi	LE-	
kétéfwi	KA-	
kútéfwi	KO-	

bùfwì	'to be sick'	
ńtéfwì	I	weren't sick, haven't been sick
étéfwì	You, A-	
útéfwì	He, O-	
bútéfwì	We, N, BO-	
bítéfwì	You	
bétéfwì	They, BA-	
lítéfwì	LE-	
kétéfwì	KA-	
kútéfwì	KO-	

bɔtinà	'to teach'	
ňtátinà	I	didn't teach, haven't taught
átátinà	You, A-	
útátinà	He, O-	
bútátinà	We, N, BO-	
bítátinà	You	
bátátinà	They, BA-	
lítátinà	LE-	
kátátinà	KA-	
kútátinà	KO-	

bɔ̀cà	'to be (somewhere)'	
ńtácà	I	weren't, haven't been at
átácà	You, A-	
útácà	He, O-	
bútácà	We, N, BO-	
bítácà	You	
bátácà	They, BA-	
lítácà	LE-	
kátácà	KA-	
kútácà	KO-	

Negative Present for verbs of state. The Present tense of verbs of state is negated by infixed a vowel on a Low tone which copies all the features of the vowel, immediately preceding it, of the verbal concordial prefix and by raising, if necessary, all tones of the Verb Stem to Mid. The appropriate verbal concordial prefix for the first person singular is LÈ- .

T51

$$\text{SD:}\quad \text{VConc} + \text{PRES} + \text{NEG} + \left[+\text{V},\ -\text{PRES} + \text{PROG}\ \_\_\right]$$

$$\text{SC:}\quad \underset{\begin{bmatrix}\alpha\text{Adv}\\ \beta\text{High}\\ \gamma\text{Back}\\ +\text{LoTo}\end{bmatrix}}{(\text{C})\ \text{V}} + \underset{\begin{bmatrix}\alpha\text{Adv}\\ \beta\text{High}\\ \gamma\text{Back}\\ +\text{LoTo}\end{bmatrix}}{\text{V}} + (\text{C}(\text{C}))\ \underset{\begin{array}{c}[\alpha\text{Adv}]\\ \\ \\ [-\text{LoTo}]\end{array}}{\text{V}}\ *$$

T52 1 + Sing ====) LÈ- / __ PRES + NEG + [+V,
-PRES + PROG __]

bɔti	'to know'	
lὲὲji	I	don't know
ààji	You, A-	
ɔ̀ɔ̀ji	He, O-	
bɔ̀ɔ̀ji	We, N, BO-	
bὲὲji	You	
bààji	They, BA-	
lὲὲji	LE-	
kààji	KA-	
kɔ̀ɔ̀ji	KO-	

bùbò	'to have'	
lììbo	I	don't have
èèbo	You, A-	
ùùbo	He, O-	
bùùbo	We, N, BO-	
bììbo	You	
bèèbɔ	They, BA-	
lììbo	LE-	
kèèbo	KA-	
kùùbo	KO-	

bɔdia	'to be sufficient'	
lɛ̀ɛ̀dia	I	are not sufficient
ààdia	You, A-	
ɔ̀ɔ̀dia	He, O-	
bɔ̀ɔ̀dia	We, N, BO-	
bɛ̀ɛ̀dia	You	
bààdia	They, BA-	
lɛ̀ɛ̀dia	LE-	
kààdia	KA-	
kɔ̀ɔ̀dia	KO-	

bɔ̀dìa	'to be good'	
lɛ̀ɛ̀dia	I	aren't good
ààdia	You, A-	
ɔ̀ɔ̀dia	He, O-	
bɔ̀ɔ̀dia	We, N, BO-	
bɛ̀ɛ̀dia	You	
bààdia	They, BA-	
lɛ̀ɛ̀dia	LE-	
kààdia	KA-	
kɔ̀ɔ̀dia	KO-	

The Negative Present for other verbs. The Negative Present for verbs other than verbs of state is formed as follows: the Verbal Concordial Prefix, which is subject to reduced vowel harmony, is on a Low tone. The Negative marker, -LA- , harmonizes with the Verb Stem and is on a Low or Mid tone opposite to the first tone of the Verb Stem. The Verb Stem retains its inherent tone.

$$\begin{array}{llcccccc} \text{T53} & \text{SD:} & \text{VConc} & + & \text{PRES} & + \ \text{-LA-} & + & \left[+\text{V},\ -\text{PRES}\_\_\_\right] \\ & \text{SC:} & \underset{\begin{bmatrix}\alpha\text{Adv}\\ -\alpha\text{Low}\\ +\text{LoTo}\end{bmatrix}}{\text{VConc}} & + & \underset{\begin{array}{c}\left[\beta\text{Adv}\right]\\ \\ \left[-\gamma\text{LoTo}\right]\end{array}}{\text{-LA-}} & + & \underset{\begin{array}{c}\left[\beta\ \text{Adv}\right]\\ \\ \left[\gamma\ \text{LoTo}\right]\end{array}}{\text{C(C)}\ \ \text{V}\ \ (\text{X})*} & \end{array}$$

When the Verbal Concordial Prefix refers to the first person singular, the concordial prefix is NA- and the /l/ of -LA- is deleted; the tone of the prefix is the same as that of the Negative marker.

$$\text{T54}\quad 1 + \text{Sing} + \text{PRES} + \underset{\left[\alpha\text{LoTo}\right]}{\text{-LA-}} \quad \text{====)} \quad \underset{\left[\alpha\text{LoTo}\right]}{\text{NAA-}}$$

Overleaf are paradigms for the Negative Present.

bɔdu	'to kill'	
nààdu	I	aren't killing, don't kill
àlàdu	You, A-	
ùlàdu	He, O-	
bùlàdu	We, N, BO-	
bìlàdu	You	
bàlàdu	They, BA-	
lìlàdu	LE-	
kàlàdu	KA-	
kùlàdu	KO-	

bɔ̀dù	'to bite'	
naadù	I	aren't biting, dɔn't bite
àladù	You, A-	
ùladù	He, O-	
bùladù	We, N, BO-	
bìladù	You	
bàladù	They, BA-	
lìladù	LE-	
kàladù	KA-	
kùladù	KO-	

bufwi	'to spit'	
nèèfwi	I	aren't spitting, don't spit
èlèfwi	You, A-	
ùlèfwi	He; O-	
bùlèfwi	We, N, BO-	
bìlèfwi	You	
bèlèfwi	They, BA-	
lìlèfwi	LE-	
kèlèfwi	KA-	
kùlèfwi	KO-	

bùfwì	'to be sick'	
neefwì	I	aren't sick
èlefwì	You, A-	
ùlefwì	He, O-	
bùlefwì	We, N, BO-	
bìlefwì	You	
bèlefwì	They, BA-	
lìlefwì	LE-	
kèlefwì	KA-	
kùlefwì	KO-	

bɔtinà	'to teach'	
nààtinà	I	don't teach, aren't teaching
àlàtinà	You, A-	
ùlàtinà	He, O-	
bùlàtinà	We, N, BO-	
bìlàtinà	You	
bàlàtinà	They, BA-	
lìlàtinà	LE-	
kàlàtinà	KA-	
kùlàtinà	KO-	

The Negative Future. The Negative Future is formed in the same way for all verbs: the Verbal Concordial Prefix, which is subject to reduced vowel harmony, is on a Low tone. The Negative marker, -LA- , harmonizes with the Verb Stem and is on a Low tone if the inherent tone of the first syllable of the Verb Stem is Low, on a High tone if the inherent tone of the first syllable of the Verb Stem is Mid. The first syllable of the Verb Stem is on a Mid or Low tone opposite to its inherent tone;

the second syllable, if any, and subsequent syllable of the Verb Stem retain their inherent tone.

T55
$$\text{SD:}\quad \text{VConc} + \text{FUT} + \text{-LA-} + \text{C(C)}\ \underset{[\gamma\,\text{LoTo}]}{\text{V}}\ (\text{X})^*$$

$$\text{SC:}\quad \underset{\begin{bmatrix}\alpha\text{Adv}\\ -\alpha\text{Low}\\ +\text{LoTo}\end{bmatrix}}{\text{VConc}} + \underset{\begin{array}{c}[\beta\,\text{Adv}]\\ \gamma\begin{bmatrix}+\text{HiTo}\\ -\text{LoTo}\end{bmatrix}\end{array}}{\text{-LA-}} + \text{C(C)}\ \underset{\begin{array}{c}[\beta\,\text{Adv}]\\ \\ [-\gamma\,\text{LoTo}]\end{array}}{\text{V}}\ (\text{X})^*$$

The Verbal Concordial Prefix for the first person singular is NÀ- ; following NÀ- , the /l/ of -LA- is deleted; however, there is no alteration in the tone of the Verbal Concord Prefix, as there is for the Negative Present.

T56 1 + Sing + FUT + -LA- ====) NÀA

It will be noticed that the Negative Future of verbs with Low tone (inherently) is the same as the Negative Present of verbs with Mid tone (inherently) since the surface tone pattern of both is Low-Low-Mid ; as far as I could determine, the ambiguity inherent in this can usually be resolved only by context.

Overleaf are paradigms for the Negative Future.

bɔdu	'to kill'	
nàádù	I	won't kill
àládù	You, A-	
ùládù	He, O-	
bùládù	We, N, BO-	
bìládù	You	
bàládù	They, BA-	
lìládù	LE-	
kàládù	KA-	
kùládù	KO-	

bɔ̀dù	'to bite'	
nààdu	I	won't bite
àlàdu	You, A-	
ùlàdu	He, O-	
bùlàdu	We, N, BO-	
bìlàdu	You	
bàlàdu	They, BA-	
lìlàdu	LE-	
kàlàdu	KA-	
kùlàdu	KO-	

bufwi	'to spit'	
nèéfwì	I	won't spit
èléfwì	You, A-	
ùléfwì	He, O-	
bùléfwì	We, N, BO-	
bìléfwì	You	
bèléfwì	They, BA-	
lìléfwì	LE-	
kèléfwì	KA-	
kùléfwì	KO-	

bùfwì	'to be sick'	
nèèfwi	I	won't be sick
èlèfwi	You, A-	
ùlèfwi	He, O-	
bùlèfwi	We, N, BO-	
bìlèfwi	You	
bèlèfwi	They, BA-	
lìlèfwi	LE-	
kèlèfwi	KA-	
kùlèfwi	KO-	

bɔtinà	'to teach'	
nàátìnà	I	won't teach
àlátìnà	You, A-	
ùlátìnà	He, O-	
bùlátìnà	We, N, BO-	
bìlátìnà	You	
bàlátìnà	They, BA-	
lìlátìnà	LE-	
kàlátìnà	KA-	
kùlátìnà	KO-	

The Negative Subjunctive. The Negative Subjunctive is formed as follows: the Verbal Concordial Prefix is subject to reduced vowel harmony, and the Negative marker -TA- harmonizes with the Verb Stem. All tones are Low.

$$\text{T57 SD:}\quad \text{VConc} + \text{SUBJ} + \text{-TA-} + \text{VSt}$$

$$\text{SC:}\quad \underset{\begin{bmatrix}\alpha\text{Adv}\\ -\alpha\text{Low}\\ +\text{LoTo}\end{bmatrix}}{\text{VConc}} + \underset{\begin{bmatrix}\beta\text{Adv}\end{bmatrix}\ \begin{bmatrix}+\text{LoTo}\end{bmatrix}}{\text{-TÀ-}} + \underset{\begin{bmatrix}\beta\text{Adv}\end{bmatrix}\ \begin{bmatrix}+\text{LoTo}\end{bmatrix}}{\text{VSt}}$$

The concordial prefix for the first person singular is lì-, as for other Subjunctives.

The paradigms for both Mid tone and Low tone verbs are identical; ambiguities are resolved by context.

bɔdu	'to kill'	bɔ̀dù	'to bite'
lìtàdù		I	
àtàdù		You, A-	
ùtàdù		He, O-	
bùtàdù		We, N, BO-	
bìtàdù		You	shouldn't kill,
bàtàdù		They, BA-	shouldn't bite
lìtàdù		LE-	
kàtàdù		KA-	
kùtàdù		KO-	

bufwi	'to spit'	bùfwì	'to be sick'
lìtèfwì		I	
ètèfwì		You, A-	
ùtèfwì		He, O-	
bùtèfwì		We, N, BO-	
bìtèfwì		You	shouldn't spit,
bètèfwì		They, BA-	shouldn't be sick
lìtèfwì		LE-	
kètèfwì		KA-	
kùtèfwì		KO-	

bɔtinà	'to teach'	
lìtàtìnà	I	shouldn't teach
àtàtìnà	You, A-	
ùtàtìnà	He, O-	
bùtàtìnà	We, N, BO-	
bìtàtìnà	You	
bàtàtìnà	They, BA-	
lìtàtìnà	LE-	
kàtàtìnà	KA-	
kùtàtìnà	KO-	

Negation of verbs marked for other aspects. While it is possible for Negation to be combined with any of the other aspect markers, save that of Certainty, only the combination of Negation and one of the Motion markers occurs at all frequently, and even that primarily with respect to the Present/Future tenses. For this reason, I will limit my discussion of the negation of verbs marked for other aspects to the negation of verbs marked for motion; this is formed as follows: the Verbal Concordial Prefix is subject to reduced vowel harmony and is on a Low tone. The Negative marker, -LÀ- for Present or Future tenses, -TÀ- for other tenses, is also on a Low tone and harmonizes with the Verb Stem and the Motion marker. The Motion marker is on a High tone and harmonizes with the Verb Stem. The first syllable of the Verb Stem is Mid or Low opposite to its inherent tone; subsequent syllables retain their inherent tone.

T58

$$\text{SD:}\quad \text{VConc} + \left(\begin{array}{l} \left\{\begin{array}{c}\text{PRES}\\ \text{FUT}\end{array}\right\} + \text{-L}\grave{\text{A}}\text{-} \\ \left\{\begin{array}{c}\text{PAST}\\ \text{SUBJ}\\ \text{IMP}\end{array}\right\} + \text{-T}\grave{\text{A}}\text{-}\end{array}\right) + \left\{\begin{array}{c}\text{-T}\acute{\text{A}}\text{-}\\ \text{-B}\acute{\text{A}}\text{-}\end{array}\right\} + \text{C(C)}\ \underset{[\alpha\text{LoTo}]}{\text{V}}\ \text{(X)}$$

$$\text{SC:}\quad \underset{\left[\begin{array}{l}\beta\,\text{Adv}\\ -\beta\text{Low}\\ +\text{LoTo}\end{array}\right]}{\text{VConc}} + \underset{\left[\begin{array}{l}\gamma\text{Adv}\\ \\ +\text{LoTo}\end{array}\right]}{\left\{\begin{array}{c}\text{-L}\grave{\text{A}}\text{-}\\ \text{-T}\grave{\text{A}}\text{-}\end{array}\right\}} + \underset{\left[\begin{array}{l}\gamma\text{Adv}\\ \\ +\text{HiTo}\end{array}\right]}{\left\{\begin{array}{c}\text{-T}\acute{\text{A}}\text{-}\\ \text{-B}\acute{\text{A}}\text{-}\end{array}\right\}} + \text{C(C)}\ \underset{\left[\begin{array}{l}\gamma\text{Adv}\\ \\ -\alpha\text{LoTo}\end{array}\right]}{\text{V}}\ \text{(X)*}$$

As before, the Verbal Concordial Prefix for the first person singular is lì- for the Subjunctive. For the other tenses, it is ǹ- , following which, the /l/ of -LÀ- is deleted.

T59

$$\text{SD:}\quad 1 + \text{Sing} + \begin{bmatrix} \text{PAST} \\ \begin{Bmatrix} \text{PRES} \\ \text{FUT} \end{Bmatrix} \end{bmatrix} + \text{NEG} + \begin{Bmatrix} \text{GO} \\ \text{COME} \end{Bmatrix}$$

$$\text{SQ:}\quad \begin{bmatrix} \text{ǹTÀ} \\ \text{NÀ} \end{bmatrix} + \begin{Bmatrix} \text{GO} \\ \text{COME} \end{Bmatrix}$$

Below are paradigms for the Negative Present Co-itive.

bɔdu	'to kill'	
nààtádù	I	aren't going (away) to kill
àlàtádù	You, A-	
ùlàtádù	He, O-	
bùlàtádù	We, N, BO-	
bìlàtádù	You	
bàlàtádù	They, BA-	
lìlàtádù	LE-	
kàlàtádù	KA-	
kùlàtádù	KO-	

bɔ̀dù	'to bite'	
nààtádu	I	
àlàtádu	You, A-	
ùlàtádu	He, O-	
bùlàtádu	We, N, BO-	aren't going
bìlàtádu	You	(away) to bite
bàlàtádu	They, BA-	
lìlàtádu	LE-	
kàlàtádu	KA-	
kùlàtádu	KO-	

bufwi	'to spit'	
nèètéfwì	I	
èlètéfwì	You, A-	
ùlètéfwì	He, O-	
bùlètéfwì	We, N, BO-	aren't going
bìlètéfwì	You	(away) to spit
bèlètéfwì	They, BA-	
lìlètéfwì	LE-	
kèlètéfwì	KA-	
kùlètéfwì	KO-	

bùfwì	'to be sick'	
nèètéfwi	I	aren't going (away) to be sick
èlètéfwi	You, A-	
ùlètéfwi	He, O-	
bùlètéfwi	We, N, BO-	
bìlètéfwi	You	
bèlètéfwi	They, BA-	
lìlètéfwi	LE-	
kèlètéfwi	KA-	
kùlètéfwi	KO-	

bɔtinà	'to teach'	
nààtátìnà	I	aren't going (away) to teach
àlàtátìnà	You, A-	
ùlàtátìnà	He, O-	
bùlàtátìnà	We, N, BO-	
bìlàtátìnà	You	
bàlàtátìnà	They, BA-	
lìlàtátìnà	LE-	
kàlàtátìnà	KA-	
kùlàtátìnà	KO-	

Imperatives. An imperative can be addressed either to one person or to more than one person; if it is addressed to only one person, then the Verbal Concordial Prefix is omitted (alternatively, is rewritten as Ø); if it is addressed to several people, however, the normal second person plural prefix, BE- , is used.

T60 2 + Sing =====) Ø / ____ IMP

So far, I have identified four types of imperative:

i. an Affirmative Simple Imperative, which carries no implication of motion.

Singular	Plural	
du	bɛ̀du	Kill!
dù	bɛ̀dù	Bite!
fwi	bìfwi	Spit!
fwì	bìfwì	Be sick!
tina	bɛ̀tina	Teach!
fɔ̀	bɛ̀fɔ̀	Wash!
fɔ	bɛ̀fɔ	Accept!
lɛmi	bɛ̀lɛmi	Open!

ii. an Affirmative Go-itive Imperative, which implies

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that the action is to be performed at some distance from the speaker. (Note the reduced vowel harmony in the plural prefix.)

Singular	Plùral	
tàdu	bìtàdu	Go kill!
tàdù	bìtàdù	Go bite!
tèfwi	bìtèfwi	Go spit!
tèfwì	bìtèfwì	Go be sick!
tàtina	bìtàtina	Go teach!
tàfɔ̀	bìtàfɔ̀	Go wash!
tàfɔ	bìtàfɔ	Go accept!
tàlɛmi	bìtàlɛmi	Go open!

iii. a Negative Simple Imperative.

Singular	Plural	
tadu	bìtadu	Don't kill!
tadù	bìtadù	Don't bite!
tefwi	bìtefwi	Don't spit!
tefwì	bìtefwì	Don't be sick!
tatinà	bìtatinà	Don't teach!
tafɔ̀	bìtafɔ̀	Don't wash!
tafɔ	bìtafɔ	Don't accept!
talɛmi	bìtalɛmi	Don't open!

and

iv. a Negative Go-itive Imperative (which occurs, however, rather rarely).

Singular	Plural	
tàtàdu	bìtàtàdu	Don't go kill!
tàtàdù	bìtàtàdù	Don't go bite!
tètèfwi	bìtètèfwi	Don't go spit!
tètèfwì	bìtètèfwì	Don't go be sick!
tàtàtinà	bìtàtàtinà	Don't go teach!
tàtàfɔ̀	bìtàtàfɔ̀	Don't go wash!
tàtàfɔ	bìtàtàfɔ	Don't go accept!
tàtàlɛmi	bìtàtàlɛmi	Don't go open!

These imperatives are formed as follows:

i. the Affirmative Simple Imperative. The concord prefix, if any, harmonizes with the Verb Stem and is on a Low tone. The first syllable of the Verb Stem retains its inherent tone; the second (and subsequent) syllables are on a Mid tone.

T61 SD: (BE-) + IMP + VSt

$$\text{SC:}\quad \underset{\begin{bmatrix}\alpha\text{Adv}\\ +\text{LoTo}\end{bmatrix}}{(\text{BE-})} + \text{C(C)}\ \underset{[\alpha\text{Adv}]}{\text{V}}\ \underset{\begin{bmatrix}\alpha\text{Adv}\\ -\text{LoTo}\end{bmatrix}}{(\text{X})^{*}}$$

ii. the Affirmative Go-itive Imperative. The concord prefix, if any, is [+Advanced] and on a Low tone (i.e., is bì-). The Go-itive marker -TA- harmonizes with the Verb Stem and is on a Low tone. The first syllable of the Verb Stem retains its inherent tone; the tone of other syllables is Mid.

T62

$$\begin{array}{llllllll} \text{SD:} & \text{(BE-)} & \text{IMP} & + & \text{GO} & + & & \text{VSt}\\ \text{SC:} & \text{(bì-)} & \text{-TA-} & + & \text{C(C)} & & \text{V} & \text{(X)*}\\ & & \begin{bmatrix}\alpha\text{Adv}\\ +\text{LoTo}\end{bmatrix} & & & & [\alpha\text{Adv}] & \begin{bmatrix}-\alpha\text{Adv}\\ -\text{LoTo}\end{bmatrix}\end{array}$$

iii. the Negative Simple Imperative. The concord prefix, if any, is [+Advanced] and on a Low tone (i.e., is bì-). The Negative marker -TA- harmonizes with the Verb Stem and is on a Mid tone. The Verb Stem retains its inherent tone(s).

T63

$$\begin{array}{llllll} \text{SD:} & \text{(BE-)} & \text{IMP} & + & \text{NEG} & + \quad \text{VSt}\\ \text{SC:} & \text{(bì-)} & \text{-TA-} & + & \text{VSt} & \\ & & \begin{bmatrix}\alpha\text{Adv}\\ -\text{LoTo}\end{bmatrix} & & [\alpha\text{Adv}] & \end{array}$$

iv. the Negative Go-itive Imperative. The concord prefix, if any is [+Advanced] and on a Low tone (i.e., is bì-). Both the Negative marker -TA- and the

Go-itive marker, -TA- , harmonize with the Verb Stem and are on Low tones. The Verb Stem retains its inherent tone(s).

T64 SD: (BE-) IMP + NEG + GO + VSt

$$\text{SC: (bì-)}\ \underset{\begin{bmatrix}\alpha\text{Adv}\\ +\text{LoTo}\end{bmatrix}}{\text{-TA-}} + \underset{\begin{bmatrix}\alpha\text{Adv}\\ +\text{LoTo}\end{bmatrix}}{\text{-TA-}} + \underset{[\alpha\text{Adv}]}{\text{VSt}}$$

Relative Verb Forms

In addition to their use in "same-subject" relative clauses (see pp 202 ff), Relative Verb Forms are used to express emphasis, generalizations, historical facts, or statements of habitual or customary action. Relative Verb Forms are found in Past, Present, or Future tenses; they have both affirmative and negative forms and can be marked for Motion away. This is illustrated as follows:

i. Statements referring to eternal truths or to events in Present time.

bàasɛ̀ mùveì nà katɔ.
birds REL+PRES+fly in sky
'Birds fly in the sky.'
bàjìì nèeveì.
monkeys REL+PRES+NEG+fly
'Monkeys don't fly.'
jɔrj mɔ̀ŋwa àdìlà teete mi.
George REL+PRES+cook food CUST+give me
'George cooks food for me.'
nɛlsɔ̀n nààŋwa teete mi.
Nelson REL+PRES+NEG+cook CUST+give me
'Nelson doesn't cook for me.'

ii. Statements referring to historical truths or to events in Past time.

kwamì ŋ̀kruma nádì ganạ lɛlɔ kùdrɛdi.
Kwame Nkrumah REL+PAS+eat Ghana body first
'Kwame Nkrumah ruled Ghana first.'
àcampɔ̀ŋ nátádì gana lɛlɔ kùdrɛdi.
Acheampong REL+PAS+NEG+eat Ghana body first
'Acheampong didn't rule Ghana first.'

iii. Prophetic statements.

àtibrùku nuɔciɛ bàbwɛnɛ.

God REL+FUT+forgive repentant

'God will forgive the repentant.'

àtibrùku naaciɛ bèkpidi.

God REL+FUT+NEG+forgive wicked

'God will not forgive sinners.'

The Relative Past. The Relative Past, both affirmative and negative forms, is formed as follows: the Relative Past prefix, NA- , is on a High tone. If the verb is being negated, then the Negative marker -TA- is infixed, also on a High tone. Monosyllabic Verb Stems are on Mid or Low tones opposite to their inherent tone; unfortunately, I have no sound data on the tonal behavior of polysyllabic Verb Stems. All vowels harmonize.

$$\begin{array}{llllllll} \text{T65} & \text{SD:} & \text{REL} & + & \text{PAS} & \text{(NEG)} & \text{C(C)} & \underset{[\alpha\text{LoTo}]}{\text{V}} \end{array}$$

$$\begin{array}{lllll} \text{SC:} & \underset{\left[\begin{array}{l}\beta\text{Adv}\\ +\text{HiTo}\end{array}\right]}{\text{NÁ}} & \underset{\left[\begin{array}{l}\beta\text{Adv}\\ +\text{HiTo}\end{array}\right]}{\text{(-TÁ-)}} & \text{C(C)} & \underset{\left[\begin{array}{l}\beta\text{Adv}\\ -\alpha\text{LoTo}\end{array}\right]}{\text{V}} \end{array}$$

ɔ̀pià nádù ɔ̀nànà ɔ́mɔ̀.

'A spear killed that man.'

ɔ̀pià nátádù ɔ̀nànà ɔ́mɔ̀.

'A spear didn't kill that man.'

ɔ̀klàma nádu ɔ̀nànà ɔ́mɔ̀.

'A dɔg bit that man.'

ɔ̀klàma nátádu ɔ̀nànà ɔ́mɔ̀.

'A dog didn't bite that man.'

àmi néyè lɛna.

'I bought meat.'

àmi nétéyè lɛna.

'I didn't buy meat.'

kwàku néyù sìka.

'Kwaku stole the money.'

kwàku nétéyù sìka.

'Kwaku didn't steal the money.'

The Affirmative Relative Present for verbs of state. The Affirmative Relative Present for verbs of state (see pp. 261 ff) is identical to the form used for the first person singular Affirmative Simple Present of verbs of state. It is formed by the following rule:

```
T66   SD:  REL  +  PRES  +  [+V, -PRES + PROG ___ ]
                              C    V    ((C)    V)
                             [~LoTo]
      SC:   N-   +  [+V, -PRES + PROG ____ ]
                     (C      V)     (C)      V
                                            [-HiTo]
          [~LoTo]      [~LoTo]              [-LoTo]
```

àkɔsùà nda kɔdi.

'Akosuah is holding a cloth.'

atà ŋ̀kpɛ kama.

'Attah is lagging behind.'

àmi ǹdi uŋuoti fùlà àtibrùku.

'I am the Lord thy God.'

ntu bɔ́mɛ̀ ndia.

'This water is sufficient.'

The Affirmative Relative Present for other verbs. The Affirmative Relative Present for other verbs is formed as follows: The Relative Affirmative Present prefix, MÒ- , is on a Low tone and harmonizes with the Verb Stem, which retains its inherent

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tone(s). All vowels harmonize.

T67 SD: REL + PRES + [+V, -PRES ___]

$$\text{SC:}\quad \underset{\begin{bmatrix}\alpha\text{Adv}\\ +\text{LoTo}\end{bmatrix}}{\text{MÒ-}} \quad + \quad \underset{[\alpha\text{Adv}]}{\text{VSt}}$$

lɛ̀pià mɔ̀du bànànà.

'Spears kill people.'

ɔ̀klàma mɔ̀dù ɔ̀nànà ɔ́mɔ̀.

'It's a dog that's biting the man.'

amà mùye lɛna.

'It's Ammah who buys meat.'

kwàku mùyu sika.

'Kwaku steals money.'

banamù mɔ̀yɔ maŋgɔ̀.

'Children like mangoes.'

The Negative Relative Present. The Negative Relative Present is formed as follows: The Relative prefix is NÀ- , on a Low tone, the Negative marker is -A- on a

Mid or Low tone opposite to the tone of the first syllable of the Verb Stem, and the Verb Stem retains its inherent tone(s). All vowels harmonize.

$$\begin{array}{llllllll}
\text{T68 SD:} & \text{REL} & + & \text{PRES} & + & \text{NEG} & + & \text{VSt} \\
\text{SC:} & \text{NÀ-} & + & \text{-A-} & + & \text{C(C)} & \text{V} & \text{(X)*} \\
 & \begin{bmatrix}\alpha\text{Adv}\\ +\text{LoTo}\end{bmatrix} & & \begin{bmatrix}\alpha\text{Adv}\\ -\beta\text{LoTo}\end{bmatrix} & & & \begin{bmatrix}\alpha\text{Adv}\\ \beta\text{LoTo}\end{bmatrix} & [\alpha\text{Adv}]
\end{array}$$

This rule, and the rule for the Negative Relative Future, should be compared with the rules for the (non-relative) Negative Present and Negative Future.

bàjìì nèèveì nà katɔ.

'Monkeys don't fly in the sky.'

ɔ̀klàma nààdu àkɔkɔ̀ ɔ́mɔ̀.

'A dog isn't killing that chicken.'

ɔ̀klàma nàadù ɔ̀nànà ɔ́mɔ̀.

'A dog isn't biting that man.'

amà nèèye lɛna.

'Ammah doesn't buy meat.'

kwàku nèèyu sika.

'Kwaku doesn't steal money.'

The Affirmative Relative Future. The Affirmative Relative Future is formed as follows: the verb is prefixed by NÙO- , in which the first syllable is Low and the second is on the same tone as the first tone of the Verb Stem. The Verb Stem retains its inherent tone(s). All vowels harmonize.

$$\begin{array}{llllllllll}
\text{T69} & \text{SD:} & \text{REL} & & + & \text{FUT} & + & \text{VSt} & & \\
 & \text{SC:} & \grave{\text{NU}} & \text{O} & + & \text{C(C)} & & \text{V} & & \text{(X)*} \\
 & & \multicolumn{2}{c}{\begin{bmatrix}\alpha\text{Adv}\\ \beta\text{LoTo}\end{bmatrix}} & & & & \begin{bmatrix}\alpha\text{Adv}\\ \beta\text{LoTo}\end{bmatrix} & &
\end{array}$$

ɔ̀pià nùɔdu ɔ̀nànà ɔ́mɔ̀.

'It's a spear that'll kill that man.'

ɔ̀klàma nùɔ̀dù ɔ̀nànà ɔ́mɔ̀.

'It's a dog that'll bite that man.'

àmi nùuye lɛna.

'It's me who'll buy meat.'

kwàku nùuyu sika.

'It's Kwaku who'll steal money.'

The Negative Relative Future. The Negative Relative Future is formed as follows: the Relative prefix is NÀ- , on a Low tone. The Negative marker is -A- on the same tone as the inherent tone of the first syllable of the Verb Stem. Monosyllabic Verb Stems have Mid or Low tone opposite to their inherent tone; my data for polysyllabic Verb Stems is insufficient to draw valid conclusions from. All vowels harmonize.

$$\begin{array}{llccccccc} \text{T70} & \text{SD:} & \text{REL} & + & \text{FUT} & + & \text{NEG} & + & \begin{array}{c}\text{VSt}\\ \left[\alpha\text{LoTo}\right]\end{array} \\ & & & & & & & & \\ & \text{SC:} & \begin{array}{c}\text{NÀ-}\\ \left[\begin{array}{l}\beta\text{Adv}\\ +\text{LoTo}\end{array}\right]\end{array} & + & \begin{array}{c}\text{-A-}\\ \left[\begin{array}{l}\beta\text{Adv}\\ \alpha\text{LoTo}\end{array}\right]\end{array} & + & \begin{array}{c}\text{VSt}\\ \left[\begin{array}{l}\beta\text{Adv}\\ -\alpha\text{LoTo}\end{array}\right]\end{array} & & \end{array}$$

The Negative Relative Future and the Negative Relative Present, therefore, are often identical and can be ambiguous.

lɛ̀pià nàadù ɔ̀nànà ɔ́mɔ̀.

'*Spears* won't kill that man.'

ɔ̀klàma nààdu ɔ̀nànà ɔ́mɔ̀.

'A *dog* won't bite that man.'

àmi nèeyè lɛnạ.

'*I* won't buy meat.'

kwàku nèeyù sìka.

'*Kwaku* won't steal money.'

Subject and Object Potentials

Subject potentials. With the exception of some verbs like ɔ́lɛ̀ (ka) 'it is expected (that)' and ɔ̀dì (ka) 'it's necessary (that)' which take sentential complements, all verbs have subjects in deep-structure, although these deep-structure subjected can be deleted optionally before a verb with a Verbal Concordial Prefix.

T71 NP + VConc + X $\overset{opt}{=====)}$ VConc + X

1a. mùnà ɔ̀klàma ɔ́dù èse. ======)
my dog 3s+PAS+kill goat
'My dog killed a goat.'

b. ɔ́dù èse.
3s+PAS+kill goat
'He killed a goat.'

2a. lɛ̀çami lɛ́nvɔ̀ líbìè. ======)
plate this LE+PAS+got-broken
'This plate got broken.'

b. líbìè.
LE+PAS+got-broken
'It got broken.'

34a. mùnà ɔ̀klàma nádù èse. ==≠===)

my dog Rel+PAS+kill goat

'It was my dog that killed a goat.'

b. *nádù èse.

Rel+PAS+kill goat

*'killed a goat.'

I can make no claims as to any deep-structure subjects for the verbs with sentential complements; there seems to be no justification in Buɛm for presupposing anything like the transposition and "It"-insertion of English sentences like "It's necessary for him to do the work" or "It's important that I see him."

Verbs fall into four categories on the basis of the subjects that they can take:

i. Those which have no subject. This group is very small and is restricted to verbs which take sentential complements:

ɔ́lɛ̀ ka lɛ̀bla kutu.

it-is-expected that 1s+SUBJ+make soup

'I have to make soup.', 'I ought to make soup.'

ii. Those which can have any Noun Phrase as their subject. This group includes verbs like bɔ̀cà 'to be (somewhere)', bɔ̀dì 'to be (someone or something)', bɔ̀dìa 'to be good', bɔdu 'to kill', buse 'to be (quality)', bɔtulɔ̀ 'to surpass', etc.

yao ɔ́dù ɔkpɛ.
Yao 3s+PAS+kill grasscutter
'Yao killed a grasscutter.'
lɛ̀tabi lɛ́dù ɔkpɛ.
stone LE+PAS+kill grasscutter
'A stone killed the grasscutter.'
kùvɔ̀ bɔni bɔ́dù ɔkpɛ.
medicine drinking BO+PAS+kill grasscutter
'Drinking poison killed the grasscutter.'

iii. Those which take only animate subjects. This group includes verbs like bùkpì 'to die', bɔ̀nu 'to see', bɔti 'to know', bɔ̀ŋwà 'to harvest', etc. I see little point in dividing this group into those verbs which can take only human subjects and those which can take any animate subjects since at worst a sentence like

ɔkpɛ ɔ́ŋwà animì.
'The grasscutter cooked rice.'

is only marginally deviant.

iv. Those which take only inanimate subjects or subjects which are presumed to be no longer animate. This group includes verbs like bɔ̀kùì 'to be dry', bɔ̀cùì 'to get burnt', bubiè 'to get broken', bɔwurɔ̀ 'to be exhausted', etc.

ɔ̀nantu ɔna.
rain 3s+PRES+rain
'It's raining.'

lɛ̀nà lifi.
meat LE+PRES+be-hot
'The meat's hot.'

kɔ̀bɛ̀ kɔ́kùì nà lɛ̀tabi katɔ.
fish KO+PAS+dry at stone top
'The fish dried on top of the rock.'

The second type, the group which can take any subject, would be left unmarked in the complex symbol for the verb; the other types would be listed as follows:

i. $\left[+\mathrm{V},\ \varnothing\ \underline{\qquad}\right]$,
iii. $\left[+\mathrm{V},\ +\mathrm{Anim}\ \underline{\qquad}\right]$, and
iv. $\left[+\mathrm{V},\ -\mathrm{Anim}\ \underline{\qquad}\right]$.

In some cases, subject selection may co-vary with complement selection, so that a verb may belong to two of the groups of subject potential depending partly on what somplements it takes. Thus, when the verb bɔhia 'to be important' is used intransitively (i.e., without any complement) it can take any Noun Phrase as its subject:

boràdà ɔga ɔhia.
Borada chief 3s+PRES+be-important
'The chief of Borada is important.'
àlà bɔ̀tia bɔhia.
things learning BO+PRES+be-important.
'Learning is important.' ;

however, when it is followed by a sentential complement, it takes no Noun Phrase as its subject:

ɔhia ka bèye adi.
3s+PRES+be-important that 3p+SUBJ+buy cloths
'It's important that they buy cloths.'

Similarly, when bɔlɛmi 'to open' is used intransitively, it takes only inanimate subjects:

ɔtɔ ɔlɛ̀mì.
house 3s+PRES+open
'The door is open.'

but it takes an animate subject when used transitively (i.e., when followed by at least one Noun Phrase):

ŋwa ɔ̀ŋwani ɔ́lɛ̀mì ɔtɔ.
his brother 3s+PAS+open house
'His brother opened the door.'

These verbs, and others like them, would have complex symbols like:

bɔhia [+V, ____∅, ∅______ ka + SUBJ + S]
'to be important'

bɔlɛmì [+V, -Anim______∅, +Anim______-Anim]
'to open'

At this point, I should mention that while Buɛm has no passives which are like those of English, it is possible to indicate that the performer of an action (i.e., the subject of a verb which is not intransitive) is either unknown or irrelevant by using the Verbal Concordial Prefix for the third person plural, BA- :

bádù ɔkpɛ.
3p+PAS+kill grasscutter
'They killed the grasscutter.' or
'The grasscutter was killed.'

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bálɛ̀mì ɔtɔ.
3p+PAS+ɔpen house
'They opened the doɔr.' or
'The doɔr was opened.'

baalɔ̀ mì kwàkù.
3p+PRES+call me Kwaku
'They call me Kwaku.' or
'I'm called Kwaku.'

bácùlà kuji.
3p+PAS+burn tree
'They burned the tree.' or
'Somebody burned the tree.' or
'The tree was burnt.'

(Note that this last example differs from

kuji kɔ́cùì.
tree KO+PAS+get-burnt
'The tree gɔt burnt.'

in that the former implies deliberate action, while the latter does not.) I am not certain as to what the deep-structure Noun Phrase subject is in these constructions (and, for that matter, in the underlying sentences for derived nouns); however, it seems likely that it is a

Noun Phrase like bècwiri bádì 'certain people' since it is this which is used when the subject of an intransitive verb or of a verb of motion is indefinite.

bècwiri bádì bébò mɛ́.
people certain 3p+PAS+come here
'Certain people came here.'

Complementation. There are several different ways by which a verb can be complemented:

i. It can have no complement at all.(i.e., a verb can be intransitive):

mùnà àti úkpì.
my father 3s+PAS+die
'My father died.'

ii. It can be followed by a single Noun Phrase, functioning as a direct object, and optional prepositional phrases of instrument and/or accompaniment (i.e., a verb can be transitive):

mùnà àti ɔ́dù ɔkpɛ.
my father 3s+PAS+kill grasscutter
'My father killed a grasscutter.'

mùnà àti ɔ́dù ɔkpɛ kù ɔ̀klantìɛ̀.

my father 3s+PAS+kill grasscutter with cutlass

'My father killed a grasscutter with a cutlass.'

mùnà àti úsè kemɔ kù mùnà uni.

my father 3s+PAS+go farm with my mother

'My father went to farm with my mother.'

iii. It can be followed by two Noun Phrases, the first functioning as an indirect object, the second as a direct object. (In many cases, the indirect object, which is almost invariably animate,can be omitted.)

lɛ́tìnà frankɔ̀fùɔ̀ lɛdi ala.

1s+PAS+teach Franco-people language things

'I taught Franco students things about language.'

lɛ́tìnà lɛdi ala.

1s+PAS+teach language things

'I taught things about language.'

bétè kwàsi ɔku.

3p+PAS+give Kwasi book

'They gave Kwasi a book.' or

'Kwasi was given a book.'

iv. It can be followed by a prepositional phrase of accompaniment or instrument:

ɔ̀ɔ̀sia ku ami.
3s+PRES+follow with me
'It's following me.'
ɔ̀ɔ̀tɛ ŋ ku ami.
3s+PRES+sleep Ø with me
'She sleeps with me.'

(In many cases, the ku of the prepositional phrase is tending to fuse with the Verb Stem.)

v. It can be followed by a prepositional phrase consisting of ku following by an Infinitival Phrase:

bɔ̀da kù àjùmà bɔ̀bla.
1p+PRES+hold with work doing
'We're in the middle of working.'

(As far as I can tell, this complement occurs only after bɔ̀dà 'to hold, to grasp'.)

vi. If the verb is bɔ̀dì 'to be', it can be followed by a single Noun Phrase in apposition with the subject of the verb:

ŋwa pàpa ɔ̀di ɔ̀kajɔma ɔɡa.

his father 3s+PRES+be Okajakrom chief

'His father is the chief of Okajakrom.'

vii. If the verb is bùsè 'to be', it can be followed by an adjective or participle:

úsè bɔ̄ɔ̄.

3s+PRES+be big

'It's big.'

viii. It can be followed by a sentential complement in the Subjunctive:

mɔbɔ̀mɔdi lìtià lɛ̀lɛ̀mì lɛdi.

1s+PRES+try 1s+SUBJ+learn Lɛ̀lɛ̀mì language

'I'm trying to learn the Lɛ̀lɛ̀mì language.'

ààkanà èse kuye.

2s+PRES+NEG+be-able 2s+SUBJ+go market

'You can't go to market.'

ix. It can be followed by a sentential complement in the Subjunctive and introduced by kà :

m̀ɔwìà kà èse kuye.

1s+PRES+seek that 2s+SUBJ+go market

'I want you to go to market.'

x. It can be followed by indirect discourse, with or without an indirect object:

búnù kà bíbò mɛ́.

1p+PAS+hear that 2p+PAS+come here

'We heard that you came here.'

básù ŋ̀ kà ŋwa pàpa úùkpì.

3p+PAS+tell him that his father 3s+PAS+PROG+die

'They told him that his father had died.' or

'He was told that his father had died.'

The rule below schematizes these various complements:

$$\text{P40}\quad \text{Comp} \longrightarrow \left\{\begin{array}{l} (\text{NP})\ \ \text{NP}\ \ (\text{PrepP}) \\ \text{Accom} \\ \text{ku}\ +\ \text{InfP} \\ \left\{\begin{array}{l}\text{Adj}\\ \text{Part}\end{array}\right\} \\ (\text{NP})\ \ (\text{kà})\ (\text{SUBJ}))\ \ \text{S}\end{array}\right.$$

and the following observations should be made:

i. Although generally a verb can be complemented in only one way, some verbs can be complemented in several different ways:

ǹda lɛ̀cami.

1s+PRES+hold plate

'I'm holding a plate.'

ǹda kù lɛ̀cami bɔ̀fɔ̀.

1s+PRES+hold with plate washing

'I'm in the process of washing the plate.'

békpò tẁifɔ̀ kù lɛ̀pià.

3p+PAS+fight Twis with spears

'They fought the Twis with spears.'

békpò kù twifò kù lɛ̀pià.

3p+PAS+fight with Twis with spears

'They fought with the Twis with spears.'

ɔ́sù lɛ̀gba.

3s+PAS+tell proverb

'She told a proverb.'

ɔ́sù mà kà ɔ̀ɔŋwà kamu.

3s+PAS+tell them that 3s+PRES+harvest rice

'She told them that she was harvesting rice.'

ii. In affirmative sentences, all transitive verbs, with the exception of verbs of motion and some verbs in serial constructions (see pp. 396 ff), must have at least one object. In the event that the exact recipient of the action of the verb is unknown or irrelevant, the noun àlà 'things' is used as the object.

*m̀ɔ̀ŋwa.
1s+PRES+cook
*'I'm cooking.'

but

m̀ɔ̀ŋwa àlà.
1s+PRES+cook things
'I'm cooking something.'

*ɔ̀ɔ̀bla.
3s+PRES+work
*'He's working.'

but

ɔ̀ɔ̀bla àlà.
3s+PRES+work things
'He's doing something.'

*bɔ́dù.
1p+PAS+kill
*'We killed.'

but

bɔ́dù àlà.

1p+PAS+kill things

'We killed things.'

This restriction does not hold for negative sentences: transitive verbs in negative sentences can occur either with or without a complement.

ńtáŋwà.

1s+PAS+NEG+cook

'I didn't cook.'

ńtáŋwà àlà.

1s+PAS+NEG+cook things

'I didn't cook anything.'

iii. In the same way that the choice of a subject for the verb is governed by selectional restrictions, so is the choice of an object for the verb: verbs like bɔdu 'to kill', for example, require animate objects, verbs like bɔpaì 'to crack' require inanimate objects, etc. (I shall consider the question of whether, for example, an object for verbs like bɔpaì 'to crack' should be formally specified as being [-Animate, +Rigid] to be irrelevant.)

iv. Verbs of motion in Buɛm should be considered as being a sub-category of the class of transitive verbs rather than as being a sub-category of the class of intransitives. The prime reason for this is that the structure of sentences like

líse̊ kemo.
1s+PAS+go farm
'I went to farm.'

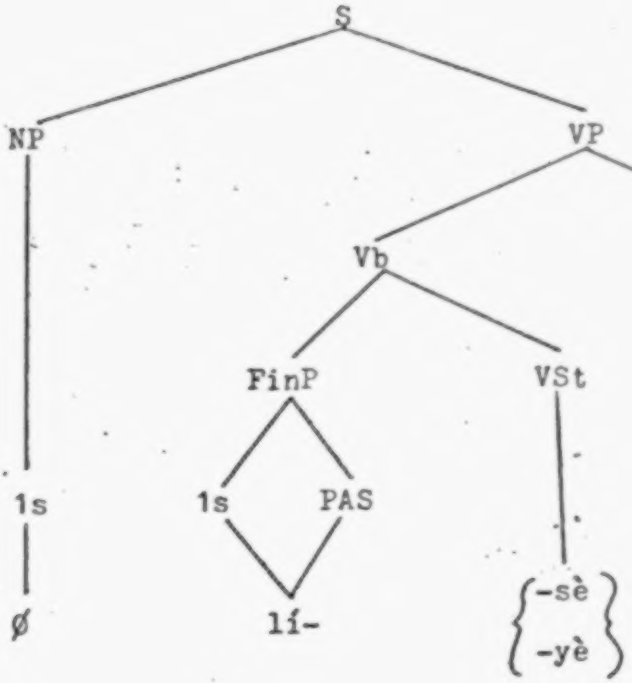
is identical to that of sentences like

líyè kemo.
1s+PAS+sell farm
'I sold a farm.'

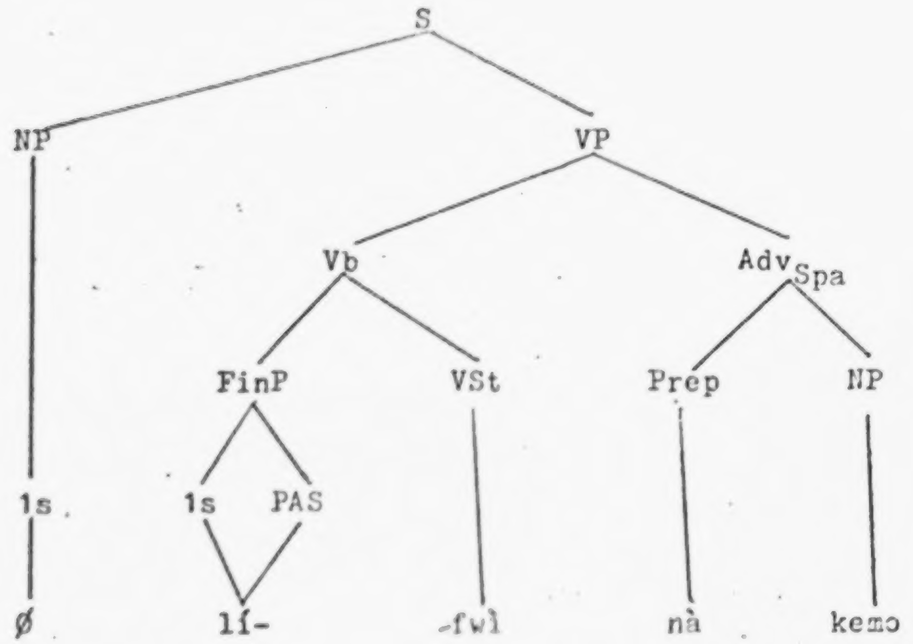
and quite different from that of sentences like

lífwì nà kemo.
1s+PAS+be-sick at farm
'I was sick at farm.'

The first two have deep-structures like:



while the last has the deep-structure:



(A small problem does arise, however, if we consider the sentences

líbò mɛ́.	'I came here.'
lífwì mɛ́.	'I was sick here.'

and

*líyè mɛ́.	*'I sold here.'

in which the parallelism seems much greater between the verb of motion and the intransitive verb than between the verb of motion and the transitive verb; it can be resolved

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more easily by allowing verbs of motion to take objects only optionally, rather than obligatorily, than by asserting that Spatial Determiners like mɛ́ 'here' and mɔ́ 'there' are complements of verbs of motion, since this latter proposal would give sentences like líbɔ̀ mɛ́. two different deep-structures, one in which mɛ́ was dominated by the Complement node and the other in which it was dominated by the Spatial Adverbial node.

I consider sentential complements on pp. 415 ff

As I stated on p. 244, the information as to the subject and complement potentials of a particular Verb Root is stored in the Complex Symbol for that Verb Root. Some of these Complex Symbols are exemplified below.

bùbɔ̀ [+V, -PRES + PROG ___, ___NP 'to have']
bubo [+V, -PRES (PROG) ___, ____ Ø, ____-Anim
'to come']
bɔ̀dà [+V, PRES (PROG) ___, Anim____, -_____Abstract
'to grasp, to hold', _____ ku + InfP
'to be in the process of']

bɔ̀dì	[+V, -PRES + PROC ___, _____ NP 'to exist as'; -PRES ___, Anim ____, -____Ø, - ____Abstract (except figuratively) 'to eat]
bɔdu	[+V, -PRES ___, ____Anim 'to kill']
bɔ̀dù	[+V, -PRES ___, Anim ____, -___Ø, -___Abstract 'to bite']
bùfwì	[+V, -PRES ___, Anim____Ø 'to be sick']
bɔkana	[+V, -PRES ___, ____InfP, ____ SUBJ + S 'to be able']
bɔku	[+V, -PRES ___, ___-I : -Abstract ____Ø 'to be dried'; ____-LA : Anim____, -____Ø, -____Abstract 'to dry']
bùkpì	[+V, -PRES ___, Anim____Ø 'to die']
bukpo	[+V, -PRES ___, Anim____(ku) Anim 'to fight (with)']
bɔ̀lɛ̀mì	[+V, -PRES ___, -Anim____Ø, Anim___-Anim, -___Abstract 'to open']
bɔnu	[+V, -PRES ___, Anim____, -____Ø, -____Abstract, _____ kà + S 'to see']
buse	[+V, -PRES + PROG ___, ____Adj, ___Part 'to be']

bɔsi	[+V, -PRES + PROG ___ , ____Ø, ____-Anim 'to come from'; ____-A : Anim ___ ku + Anim 'to follow after']
bɔ̀sù	[+V, -PRES ___, Anim_____(Anim) Abstract, Anim____(Anim) ka + S 'to tell']
bɔti	[+V, -PRES + PROG ___, Anim____NP, Anim___ ka + S 'to know'; ___-A : -PRES ___, Anim____Abstract, Anim____ka + S 'to learn'; ____-NA : -PRES___, Anim___ (Anim|NP), Anim___(Anim) ka + S 'to teach, to show']

Adverbials and Prepositional Phrases

There are five types of adverbials:

i. Adverbials of accompaniment (Accom),

ii. Instrumentals (Inst),

iii. Manner adverbials (Adv_{Man}),

iv. Spatial adverbials (Adv_{Spa}), and

v. Time adverbials (Adv_{Temp}).

The first two are dominated by the node labelled "PrepP_{ku}" in the verbal complement; the last three are dominated by the node labelled "Adv" in the Verb Phrase.

P41 PrepP_{ku} ------) (Accom)(Inst)

P42 Adv ----------) (Adv_{Man})(Adv_{Spa})(Adv_{Temp})

Adverbials of accompaniment. Adverbials of accompaniment consist of the preposition kù 'with' followed by an animate Noun Phrase.

$$\text{P43} \quad \text{Accom} \quad \text{-------)} \quad \text{kù} \; + \; \underset{[+\text{Anim}]}{\text{NP}}$$

There are a few verbs which take complements consisting solely of adverbials of accompaniment: bɔ̀sìa 'to follow', bɔtɛ 'to lie', bɔsa 'to meet', and adverbials of accompaniment can follow most verbs which have only a single object or which are verbs of motion.

lɛ́kà ɔku ɔ́mɔ̀ kù kwàmì.
1s+PAS+read book that with Kwame
'I read the book with Kwame.'

m̀ɔ̀di àbolò kù àkɔsùà.
1s+PRES+eat abolo with Akosuah
'I'm eating "abolo" (a kind of bread) with Akosuah.'

lísè ɔma ŋ kemɔ kù mɛnsà.
1s+PAS+go town Ø inside with Mensah.
'I went to town with Mensah.'

bébò mɛ́ kù mana bebi.
3p+PAS+come here with their children
'They came here with their children.'

I should point out, however, that it is much more common to find sentences with compound subjects than it is to find sentences with adverbials of accompaniment.

àmi ku àkɔsùà bɔ̀ɔ̀di àbɔlò.
I and Akosuah 1p+PRES+eat abolo
'Akosuah and I are eating abolo.'

Instrumentals. Instrumental adverbials consist of the preposition kù 'with' followed by an inanimate Noun Phrase.

P44 Inst -------) kù + NP [-Anim]

They can follow virtually any transitive verb and a number of intransitive verbs as well.

bádù bakpɛ kù mànà lɛ̀klantɪ̀ɛ̀.
3p+PAS+kill grasscutters with their cutlasses
'They killed grasscutters with their cutlasses.'

kòfi ɔ́kùlɔ̀ lìlù kù ŋwa ɔ̀sikà.
Kofi 3s+PAS+cut yam with his knife
'Kofi cut yams with his knife.'

bɔ̀ɔfɔ̀ bua adi kù omɔ.
1p+PRES+wash our clothes with Omo.
'We wash our clothes with Omo.'

bèculi bámɛ̀ bék pò kù àtabi.
people these 3p+PAS+fight with stones
'These people fought with stones.'

bèculi bámɛ̀ békpò kù twifɔ kù àtabi.
people these 3p+PAS+fought with Twis with stones
'These people fought with the Twis with stones.'

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Manner adverbials. Manner adverbials are formed in one of three ways:

i. By use of a Manner adverb (Manner),

ii. By use of a Prepositional Phrase consisting of na followed by either kalɛ 'manner' or ùlu 'way' and appropriate modifiers, or

iii. By use of a Prepositional Phrase consisting of àni 'like' followed by a Noun Phrase followed optionally by kalɛ 'manner'.

P45

$$\text{Adv}_{\text{Man}} \text{ ----) } \left\{\begin{array}{lll} & \text{Manner} & \\ \text{na} & \left\{\begin{array}{l}\text{kal}\varepsilon \\ \text{ùlu}\end{array}\right\} & \text{Modif} \\ \text{àni} & \text{NP} & (\text{kal}\varepsilon)\end{array}\right.$$

There are a great many words which are used as manner adverbs; while many of them are onomatopoeic and may be restricted to one or two verbs, there are a number of manner adverbs which can be used with a great variety of verbs; some of these are:

basa-basa	'without paying attention'
bwɛ-bwɛ	'badly'
bwɛɛ̀	'slowly'

gɔndi-gɔndi	'crookedly'
kàdwɛ̀	'fine'
kalɛ-kalɛ	'half-heartedly, without concentrating'
kɛdɛ-kɛdɛ	'completely'
kɛ̀si-kɛ̀si	'everywhere'
kra(-kra)	'"at aaalll," in no way'
momɔmɔ	General intensifier: very loudly, very rapidly, etc.
ŋwaà	'clearly'
pla	'quickly'
sinini	'as expected'
sɔsɔ̃	'truly'
tàtaàta	'level'
tɛ̀tɛɛ̀tɛ	'(filled) to the top'
taajaa	'excessively'
kaja	'excessively'

A number of adjectives can also be used as manner adverbs. Probably the most obvious characteristic of the manner adverbs is their reduplication; slightly less obvious is the fact tha a number of them show obvious signs of relationship with other kinds of words:

sɔ	'true'	sɔsɔ̃	'truly'
kɛ̀si	'place' (n)	kɛ̀si-kɛ̀si	'everywhere'
bwɛ	'bad'	bwɛ-bwɛ	'badly'
bubomɔ	'be fat'	momɔmɔ	Intensifier
bɔta	'to rise'	tàtaàta	'level'

Manner adverbials introduced by na are most often used to describe actions for which there is no one-word adverb.

ɔ́dà bù na kalɛ nààdià bù.
3s+PAS+treat us in manner Rel+PRES+NEG+be-good us
'He treated us in a manner that wasn't good for us.'
ɔ́blà ŋwa kàlàbla n'ùlu ɔni lɛ́ɛ̀wìà.
3s+PAS+do his work in+way REL 1s+PAṠ+PROG+seek
'He did his work in the way I had looked for.'

Manner adverbials introduced by àni are used for similes.

kòjo ɔ̀ɔ̀bla lɛlɔ àni ɔ̀tìnane (kalɛ).
Kojo 3s+PRES+do self like teacher (manner)
'Kojo acts like a teacher.'

kwabɛna ɔ̀ɔlɛ̀mì àni ɔɡa (kalɛ).
Kwabena 3s+PRES+talk like chief (manner)
'Kwabena talks like a chief.'

This type of manner adverbial should be compared with the subordinate clauses of manner (pp. 441-2).

Spatial adverbials. Spatial adverbials consist either of the stem to the Spatial Determiners (see pp. 195ff) or of a prepositional phrase introduced by nà and followed either by the name of a place or by a Noun Phrase in which the head noun refers to a place.

$$\text{P46} \quad \text{Adv}_{\text{Spä}} \text{-----}) \begin{Bmatrix} \text{Det}_{\text{Spa}} \\ \text{na} + \underset{[+\text{Place}]}{\text{NP}} \end{Bmatrix}$$

In "Standard Buɛm," the Spatial Determiners are mɛ́ 'here' and mɔ́ 'there'; in Baglo and Baglo-Odumase, they are mɛ́ 'here', ńvɔ̀ 'there', and ńjɛ̀ 'yonder'. The same nouns which can function as the objects of verbs of motion can also function as the objects of the preposition na in a Spatial adverbial. Other than the names of places such as Hohoe, Jasikan, Kumasi, etc. or such as

ɔtɔ	'house'
ɔma	'town'
kemu	'farm'
kadruì	'compound (fig., home)'
kuye	'market',

the nouns used most commonly as the objects of a verb of motion or of na in a spatial adverbial are:

kama 'behind, in back of'

lɛ́nù kwamì na kadruì kama.

'I saw Kwame in back of the house.'

animì 'in front of'

lɛ́nù kwamì na kadruì animì.

'I saw Kwame in front of the house.'

lɔlɔ 'on top of'

lɛ́nù àyìkpɛ na libɔkù lɔlɔ.

'I saw a mouse on top of the chair.'

kalɔ 'beneath, under'

lɛ́nù àyìkpɛ na libɔkù kalɔ.

'I saw a mouse under the chair.'

kadu 'bottom' (on the outside)

lɛ́nù ɛ̀fi na libwi kadu.

'I saw dirt on the bottom of the pot.'

kemo 'inside'

lɛ́nù kwamì na ɔtɔ η kemo.

'I saw Kwame inside the house.'

kudɔ (Lɛ̀f. krɔ) . 'beside, chez, near'

lɛ́nù àyìkpɛ na kadruì kudɔ.

'I saw a mouse beside the house.'

lɛ́nù àyìkpɛ na vampair kudɔ.

'I saw a mouse near Vampire.' or '... around Vampire'

kakɛ 'side, section, area, "quarter"'

lɛ́nù kwamì na kadruì kɔ̀dì ànu kakɛ.

1s+PAS+see Kwame at compound eating hand side

'I saw Kwame in the right-hand side of the compound.'

ǹtɛ̀ 'between'

borada ǹca lisɛmi kù jasikan ǹtɛ̀.

Borada REL+PRES+be-at Teteman and Jasikan between

'Borada is between Teteman and Jasikan.'

akɔ 'among'

ulie bàlɛ̀mì akɔ.

'He stays among the Lɛ̀lɛ̀mì.'

katɔ 'up, above, over'

ɔfɛ ɔ̀ca bua katɔ.

'The sun is above us.'

kàda 'down, below, at the foot of'

kɛtu kámɔ̀ kàca kɔ̀bì kada.

'The river is at the foot of the mountain.'

The following observations should be made:

i. The nouns which function as the objects of na cannot be considered as post-positions since virtually all of them have the same distribution as other inanimate nouns.and virtually all have otherwise independent status in the language, as we can see by omitting the na from a couple of sentences: in

lɛ́nù kwamì kadruì kama.

'I saw the back of Kwame's house.',

for example, and in

lɛ́nù àyìkpɛ libokù lɔlɔ.

'I saw the top of the mouse's chair.',

kama 'back' and lɔlɔ 'top' both function as the objects of the verb lɛ́nù 'I saw.' The fact that the objects of na are _not_ post-positions is made especially clear by looking at the words of the folk song "Lɛ̀là n'àva" ("The Things You Sow"):

...lɛ̀là n'ávà na kalɔ,

...thing REL+2s+PAS+sow on Earth,

'...what you sowed on Earth,'

àŋu n'èède na katɔ...'

it REL+2s+FUT+CERT+reap in Heaven...

'that's what you'll reap in Heaven...',

in which both kalɔ and katɔ can only be considered as full nouns.

ii. kakɛ 'side' is usually preceded by either kɔ̀dì ànu 'right hand' or kɔ̀mi 'left'; it may also be preceded by either kama 'rear' or animì 'front'.

iii. katɔ and kàda are also used to refer to North and South, respectively; the other two compass points, East and West, are referred to by the phrases ɔfɛ katukɔ̀ 'sun's rising place' and ɔfɛ kanuŋ̀kɔ̀ 'sun's setting place', respectively.

iv. The difference between sentences like úsè ɔma. and úsè ɔma ŋ̀ kemo. or between sentences like úsè ɔtɔ. and úsè ɔtɔ ŋ kemo. is analogous to the difference between the English sentences "He went to town." and "He went to the town." or between "He went home." and "He went to the house."

Time adverbials. Time adverbials usually come at the end of a sentence, but may be front-shifted for emphasis; the time adverbials ebia 'perhaps' and ɔ̀fàlɛ 'perhaps' always occur at the beginning of a sentence.

T72 SD: $\mathrm{NP} + \mathrm{V}\ (\mathrm{X})\ \mathrm{Adv}_{\mathrm{Temp}} + \mathrm{EMPH}$

SC: $\mathrm{Adv}_{\mathrm{Temp}} + \mathrm{NP} + \mathrm{V}\ (\mathrm{X})$

T73 SD: $\mathrm{NP} + \mathrm{V}\ (\mathrm{X}) \left\{ \begin{matrix} \text{ebia} \\ \text{ɔ̀fàlɛ} \end{matrix} \right\}$

SC: $\left\{ \begin{matrix} \text{ebia} \\ \text{ɔ̀fàlɛ} \end{matrix} \right\} + \mathrm{NP} + \mathrm{V}\ (\mathrm{X})$

There are three kinds of time adverbials:

i. Time adverbs,

ii. Adverbial phrases of time, consisting of a temporal noun and its modifiers, if any, and optionally preceded by asa 'before', and

iii. Adverbial phrases of time, consisting of either asa 'before' or na 'at' followed by an abstract noun followed by uwi 'time'. It is possible for the different kinds of time adverbial to co-occur, either with other time adverbials of the same type or of different types; however, I have not yet worked out the patterns of ordering or the co-occurrence restrictions, and in fact it is possible that the two types "Time" and " $\underset{[+\text{Temp}]}{\text{N}}$ " can be collapsed into one.

P47

$$\text{Adv}_{\text{Temp}} \longrightarrow \left\{ \begin{array}{l} \qquad\quad \text{Time} \\ (\text{asa})\ \underset{[+\text{Temp}]}{\text{N}} \qquad (\text{Modif}) \\ \left\{\begin{array}{c}\text{asa}\\ \text{na}\end{array}\right\} \underset{[+\text{Abstract}]}{\text{NP}} \qquad \text{uwi} \end{array}\right.$$

Below is a list of some of the more common words used in time adverbials.

kamadi	'yesterday'
ɔmwi	'today'
kɔnadi	'tomorrow'
kadi	'a particular day'
ɔ̀fayĩ̀	'now'
ɔ̀pɛ	'now'
daà	'always'
uwi biala kemɔ	'all the time'

kùdiì	'never'
kuku	'ancient times'
diɛdi	'the future'
uyɔlu	'a few days'
kama	'before'
tɔ	'yet, still'
lɛkwa, a-	'year'
kɔbulì, a-	'month'
dàpɛ	'week'
limeì, e-	'day'
ɔ̀tantà, lɛ̀-	'morning' (poetic)
lɛ̀dìjɛ̀	'morning'
ɔfwi	'daytime'
useì, li-	'evening'
use, li-	'night'
kasa	'night-time'

The original Buɛm calendar consisted of five-day weeks; however, this calendar is no longer in use except by fetish-priests and others who observe the traditional forms of worship and has been replaced by the general

Ghanaian calendar, which uses a seven-day week. The names of the days of the week according to the traditional calendar are:

1st day	lèyaì	Aya-day (Goddess)
2nd "	àdɔlimeì	Adɔli-day (God)
3rd "	lìme plɔɔ̀	
4th "	lìyeì	
5th "	limenyɔnei	(No farming for kudubi cla

The names of the days of the week according to the general Ghanaian calendar and the birthday names are:

	Day	Boy	Girl
Sunday	kwasida	Kwasi	Akosuah
Monday	joda	Kojo	Adjuah
Tuesday	blada	Kwabena	Amina
Wednesday	kuda	Kwaku	Akuah
Thursday	yaoda	Yao	Yawa
Friday	fida	Kofi	Afua, Afi
Saturday	mɛmlida	Kwame	Ammah

Part VI. Conjunction and Subordination

Conjunction of Noun Phrases

When two or more sentences differ only in their selection of instances of Noun Phrase in the same position, they can be conjoined by inserting ku 'and' ɛ iyɛ or mànà 'or' between each pair of dissimilar Noun Phrases and retaining the balance of the structure of only one of the sentences.

$$\text{T74}\quad \left.\begin{matrix} (X)\ NP_1\ (Y) \\ (X)\ NP_2\ (Y) \end{matrix}\right\} \quad ======)$$

$$(X)\ NP_1 \begin{Bmatrix} \text{iyɛ} \\ \text{kʊ} \\ \text{mànà} \end{Bmatrix} NP_2\ (Y)$$

1a. líyè ɔ̀siì.
'I bought a gourd.'
b. líyè ɔfɛ.
'I bought a calabash'
======)
c. líyè ɔ̀siì ku ɔfɛ.
'I bought a gourd and a calabash.'

2a. békpɔ̀ kù àsantifo n'uwi kuku.
'They fought with the Asanti long ago.'
b. békpɔ̀ kù kwawufo n'uwi kuku.
'They fought with the Kwawu long ago.'
======)
c. békpɔ̀ kù àsantifo ku kwawufo n'uwi kuku.
'They fought with the Asante and the Kwawu long ag

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When the conjoined Noun Phrases consist of nouns, infinitival phrases, or pronouns in the third person, then the ordering is irrelevant;

líyè ɔ̀siì ku ɔfɛ kàmàdì.
'I bought a gourd and a calabash yesterday.'

and

líyè ɔfɛ ku ɔ̀siì kàmàdì.
'I bought a calabash and a gourd yesterday.'

are both equally acceptable. However, when one or more of the conjoined Noun Phrases is a pronoun in either the first or the second person, the ordering is that first person pronouns come before second person pronouns, which come before everything else.

àlà ɔ̀tìnane ɔ̀ɔwìà mi ku àwo ku bùlà bakpana.
thing teacher 3s+PRES+seek me and you(s) and
our friends
'The teacher is looking for me and you and our
friends.'

*àlà ɔ̀tìnane ɔ̀ɔwìà ɔ ku àmi.
thing teacher 3s+PRES+seek you(s) and me
*'The teacher is looking for you and me.'

Whether the pronouns are singular or plural is irrelevant.

$$\text{T75}\quad \left.\begin{array}{l} \left.\begin{array}{l} (X)\ [1]\ (Y) \\ (X)\ [2]\ (Y) \\ (X)\ \text{NP}\ (Y) \end{array}\right) \end{array}\right\} \Longrightarrow$$

$$(X)\ \left(\,[1]\ \text{ku}\ \mathrm{I}\ [2]\ \text{ku}\ \mathrm{I}\ \text{NP}\,\right)\ (Y)$$

Conjoined NPs as subjects of a verb. When the subject of a finite verb which is not a Relative Verb form consists of two or more conjoined Noun Phrases, not more than one of which is animate, the verb agrees in number and Noun Class only with the Noun Phrase which immediately precedes it; the number and/or Noun Class of earlier Noun Phrases is completely irrelevant.

lìbwì lɛ̀paì.

LE/A+pot LE+PRES+be-cracked

'The pot is cracked.'

lɛ̀cami lɛ̀paì.

LE/A+dish LE+PRES+be-cracked

'The dish is cracked.'

lìbwì ku lɛ̀cami lɛ̀paì.

LE/A+pot and LE/A+dish LE+PRES+be-cracked

'The pot and the dish are cracked.'

*lìbwì ku lɛ̀cami àpaì.

*LE/A+pot and LE/A+dish A+PRES+be-cracked

àcami àpaì.

LE/A+dish A+PRES+be-cracked

'The dishes are cracked.'

lìbwì ku àcami àpaì.

LE/A+pot and LE/A+dish A+PRES+be-cracked

'The pot and the dishes are cracked.'

àcami ku lìbwì lɛ̀paì.

LE/A+dish and LE/A+pot LE+PRES+be-cracked

'The dishes and the pot are cracked.'

*àcami ku lìbwì àpaì.

*LE/A+dish and LE/A+pot A+PRES+be-cracked

ɔfɛ ɔ́nvɔ̀ ɔ̀paì.

O/LE+calabash O+that O+PRES+be-cracked

'That calabash is cracked.'

ɔfɛ ɔ́nvɔ̀ ku lìbwì lɛ̀paì.

O/LE+calabash O+that and LE/A+pot LE+PRES+be-cracked

'That calabash and the pot are cracked.'

lìbwì ku ɔfɛ ɔ́nvɔ̀ ɔ̀paì.

LE/A+Pot and O/LE+calabash O+that O+PRES+be-cracked

'The pot and that calabash are cracked.'

*lìbwì ku ɔfɛ ɔ́nvɔ̀ lɛ̀paì.

*LE/A+pot and O/LE+calabash O+that LE+PRES+be-cra

ɔ̀bɛ̀diɛ̀ ɔ̀ca ɔtɔ ŋ kemo.

O/LE+plantain O+PRES+be-in room Ø inside

'A plantain is in the room.'

kàjìì kàca ɔtɔ ŋ kemo.

KA/BA+monkey KA+PRES+be-in room Ø inside

'A monkey is in the room.'

ɔ̀bɛ̀diɛ̀ ku kàjìì kàca ɔtɔ ŋ kemo.

O/LE+plantain and KA/BA+monkey KA+PRES+be-in
    room inside

'A plantain and a monkey are inside the room.'

kàjìì ku ɔ̀bɛ̀diɛ̀ ɔ̀ca ɔtɔ ŋ kemo.

KA/BA+monkey and O/LE+plantain O+PRES+be-in
    room inside

'A monkey and a plantain are inside the room.'

?kàjìì ku ɔ̀bɛ̀diɛ̀ bàca ɔtɔ ŋ kemo.

?KA/BA+monkey and O/LE+plantain BA+PRES+be-in
    room inside

*ɔ̀bɛ̀diɛ̀ ku kàjìì ɔ̀ca ɔtɔ ŋ kemo.

*O/LE+plantain and KA/BA+monkey O+PRES+be-in
    room inside

Similarly,

> ɔfɛ ku lìbwì ku àcami ku kuji kɔ̀paì.
>
> 'A calabash and a pot and dishes and a stick are cracked.'
>
> kuji ku ɔfɛ ku lìbwì ku àcami àpaì.
>
> 'A stick and a calabash and a pot and dishes are cracked.'
>
> àcami ku kuji ku ɔfɛ ku lìbwì lɛ̀paì.
>
> 'Dishes and a stick and a calabash and a pot are cracked.'
>
> lìbwì ku àcami ku kuji ku ɔfɛ ɔ̀paì.
>
> 'A pot and dishes and a stick and a calabash are cracked.'

are all acceptable, while sentences like

> *àcami ku kuji ku lìbwì àpaì.
>
> *LE/A+Dish and KO/A+stick and LE/A+pot A+PRES+be-cracked

are all unacceptable, even though the Noun Phrases concerned all have identical plural forms. (Incidentally, this provides strong counter-evidence to the suggestion made by Voeltz (1971) and Givon (1972) that conjoined

Noun Phrases probably always entail plural agreement forms: in Buɛm, the same rule (see page 238) which controls agreement for simple Noun Phrases also controls agreement for most compound Noun Phrases as well.)

The situation is different, however, when two or more of the conjoined Noun Phrases are animate; in this case, the following rules apply:

i. If one of the conjoined Noun Phrases is the first person pronoun, either singular or plural, then Verbal Concordial Prefix is marked for the first person plural.

T76 SD: [1] ku NP + VConc
SC: [1] ku NP + BO-
àmi ku àwo búsè skul.
I and you(s) 1p+PAS+go school
'You and I went to school.'
àmi ku kòfi búsè skul.
I and Kofi 1p+PAS+go school
'Kofi and I went to school.'

ii. If neither is the first person pronoun, but one is the second person pronoun, either singular or plural, then the Verbal Concordial Prefix is marked for the second person plural.

T77 SD: [2] ku NP + VConc

SC: [2] ku NP + BE-

àwo ku kɔ̀fi bísè skul.

yɔu(s) and Kɔfi 2p+PAS+gɔ schɔɔl

'You and Kɔfi went tɔ schɔɔl.'

àwɔ ku muna bebi bísè skul.

yɔu(s) and my children 2p+PAS+gɔ schɔɔl

'You and my children went tɔ schɔɔl.'

iii. Otherwise, the Verbal Concordial Prefix is marked for the third person plural.

T78 SD: NP ku NP + VConc
[+Anim] [+Anim]

SC: NP ku NP + BA-
[+Anim] [+Anim]

kofɔnù ku èse bàca liyu kemo.

sheep and gɔat 3p+PRES+be-in shed inside

'A sheep and a goat are inside the shed.'

ŋwà ùbì ku ŋwà pàpa békpi.

his child and his father 3p+PAS+die

'His child and his father died.'

Effects of conjunction on noun modifiers. Generally, there is no reduction of identical noun modifiers when two or more Noun Phrases are conjoined.

3a. lìbwì lìkpidi
'a bad pot'
======)
b. lɛ̀cami lìkpidi
'a bad dish'

c. lìbwì lìkpidi ku lɛ̀cami lìkpidi.
'a bad pot and a bad dish!

4a. bànànà bámɛ̀
'these men'
======)
b. bèlɔ̀ku bámɛ̀
'these women'

c. bànànà bámɛ̀ ku bèlɔ̀ku bámɛ̀
'these men and women'

There are, in Buɛm, no ambiguities similar to the oft-quoted "old men and women," which would be rendered in Buɛm either as bànànà kuku kù bèlɔ̀ku , where bànànà kuku 'old men' would form one unit and bèlɔ̀ku 'women' another or as bànànà kuku ku bèlɔ̀ku kuku 'old men and old women.'

Conjunction of Verb Phrases (Serial Verbs)

Serial verbal constructions are the result of the conjunction of two or more sentences which have the same Noun Phrase(s) as their subjects, which refer to the same periods of time, which are all affirmative or all negative, and which differ only in their selection of verbs and complements. The Verb Phrases are ordered by the referential sequence of events, so that a verb referring to one event which takes place before a second event will occur in the sentence earlier than a verb referring to the second event; when they appear, however, the verb bɔsɔ 'to again' always occurs first in a serial construction and the verb butulò 'to surpass' always occurs last in a serial construction.

ɔ́sɔ̀ ɔ́dì sìka útùlò amà
3s+PAS+again 3s+PAS+eat money 3s+PAS+surpass Ammah
'She again wasted more money than Ammah.'
lísè kuye líyè lɛna lɛ́kù.
1s+PAS+go market 1s+PAS+buy meat 1s+PAS+chew
'I went to the market, bought meat, and ate it.'

Furthermore, when more than one verb is used to describe a particular segment of an event, generally the more general verb precedes the more specific one.

ɔga ɔ́mɔ̀ ɔ̀ɔtɛ̀mì ɔ̀ɔsù mà ŋwa mla.
chief that 3s+PRES+speak 3s+PRES+tell them his law
'That chief is speaking to tell them his law.'
àtiblùku ùàbla ùàtɛ ku bèkpine fwìl.
God 3s+CERT+do 3s+CERT+judge with dead all
'God will certainly act to judge all the dead.'

To a large extent the motivation for the conjunction of different sentences to form a serial construction is referential and, therefore, extra-linguistic--I can find no plausible way which is not also circular to indicate in the grammar itself that the speaker considers one event to be taking place simultaneously with another; for this reason, the following rule is intended only as a rough guide for the formation of serial verbal constructions.

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$$\left.\begin{array}{l} \mathrm{TIME}_1 + \mathrm{NP}_1 + \mathrm{VP}_1 \\ \mathrm{TIME}_1 + \mathrm{NP}_1 + \mathrm{VP}_2 \end{array}\right\} \qquad \text{======)}$$
$$\mathrm{NP}_1 + \mathrm{VP}_1 + \mathrm{VP}_2$$

It will be noted that there is no surface connective conjoining the two Verb Phrases.

Owing partly to co-occurrence restrictions on Modality markers which apply to particular verbs, a formal presentation of the rules governing the Tense and Modality markings of verbs in serial constructions would be rather cumbersome and, I feel, not especially helpful; hence, I prefer to make the following observations informally only.

i. As stated, all verbs in a serial construction must be either all affirmative or all negative.

kòfi úyè lɛna ɔ́kù.
Kofi 3s+PAS+buy meat 3s+PAS+chew
'Kofi bought the meat and ate it.'
kòfi útéye lɛna útáku.
Kofi 3s+PAS+NEG+buy meat 3s+PAS+NEG+chew
'Kofi didn't buy any meat and eat it.'
*kòfi úyè lɛna útáku.
*Kofi 3s+PAS+buy meat 3s+PAS+NEG+chew
*'Kofi bought meat and didn't eat it.'

ye lɛna ku.

2s+IMP+buy meat 2s+IMP+chew

'Buy meat and eat it!'

tèye lɛna tàku.

2s+IMP+NEG+buy meat 2s+IMP+NEG+chew

'Don't buy meat and eat it.'

*ye lɛna tàku.

*2s+IMP+buy meat 2s+IMP+NEG+chew

*'Buy meat and don't eat it!'

It should be noted, however, that the starred examples would be grammatical if the Verb Phrases were separated either by a brief interval or by nsu 'but'; however, in this case, we would have two separate sentences, rather than one single sentence with a serial verb construction.

kòfi úyè lɛna nsu útáku.

Kofi 3s+PAS+buy meat but 3s+PAS+NEG+chew

'Kofi bought some meat but he didn't eat any.'

ye lɛna, tàku.

2s+IMP+buy meat. 2s+IMP+NEG+chew.

'Buy meat! Don't eat any!'

ii. As stated, all verbs must have the same time reference and, where permitted by selectional restrictions on an individual verb's choice of Modality markers, all verbs in a serial construction must have the same markers for Modality (in addition to the markers for Negation, just discussed).

líìtì ɔ̀sikà lɛ́ɛkulɔ lìlù.
1s+PAS+PROG+take knife 1s+PAS+PROG+cut yam
'I've taken a knife and cut the yam.'
àtiblùku ùàbla ùàtɛ ku bèkpine fwiì.
God 3s+CERT+do 3s+CERT+judge with dead all
'God will surely act to judge all the dead.'
*àtiblùku ùàbla ɔ̀luɔ̀tɛ ku bèkpine fwiì.
*God 3s+CERT+do 3s+FUT+judge with dead all
*àtiblùku ɔ̀luɔ̀bla ùàtɛ ku bèkpine fwiì.
*God 3s+FUT+do 3s+CERT+judge with dead all
àtiblùku ɔ̀luɔ̀bla ɔ̀luɔ̀tɛ ku bèkpine fwiì.
God 3s+FUT+do 3s+FUT+judge with dead all
'God will act to judge all the dead.'

This rule is subject to several caveats:

(a.) When a verb in a serial construction follows

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the verb buse 'to go' in the Present Affirmative tense, it is marked for the Aspect of Motion Away.

lísèlà kuye ǹtéye lɛna ǹtáku.
1s+PRES+go market 1s+GO+buy meat 1s+GO+chew
'I'm going to market to go buy meat to go eat.'
*lísèlà kuye mùùye lɛna mɔ̀ɔkù.
*1s+PRES+go market 1s+PRES+buy meat 1s+PRES+chew
*lísèlà kuye mèèyè lɛna mààku.
*1s+PRES+go market 1s+CERT+buy meat 1s+CERT+chew

(b.) When the first verb of a serial construction (or, if the first verb is bɔsɔ 'to continue', the second verb) is in the affirmative but does not refer to the present time, then subsequent verbs may be in the subjunctive; this usually indicates that the purpose of the first action was to cause the second.

líyè lɛna nà kuye lɛ̀ku.
1s+PAS+buy meat at market 1s+SUBJ+chew
'I bought meat at the market in order to eat it.'
mèti ɔ̀fɛ lɛni ntu.
1s+CERT+take calabash 1s+SUBJ+drink water
'I'll pick up a calabash to drink water from it.'

ùtétì ɔ̀fɛ ɔni ntu.

3s+GO+take calabash 3s+SUBJ+drink water

'He's going to take a calabash to drink water from.'

ɔ̀lubù ɔ̀fɛ bùti ɔni ntu.

3s+FUT+come calabash INF+take 3s+SUBJ+drink water

'He will pick up a calabash to drink water from.'

(ɔ̀lubù ɔ̀fɛ bùti is in the "long form" of the Affirmative General Future (see pp. 275ff); when the second verb in a serial construction does not refer to the purpose of the first verb, and the first verb is in the "long form" of the Affirmative General Future, then the second Verb Phrase has the form of an Infinitival Phrase,

ɔ̀lubù ɔ̀fɛ bùti bɔni ntu.

3s+FUT+come calabash INF+take INF+drink water

'He'll pick up a calabash and drink water from it.', presumably reflecting the view that the underlying sentences are

ɔ̀lubù ɔ̀fɛ bùti. 'He'll pick up a calabash.'

and

ɔ̀lubù ntu bɔni. 'He'll drink water.')

(c.) When the first verb of a serial construction (or, if the first verb is bɔsɔ 'to continue', the second verb) is in the affirmative and refers to customary or habitual actions, then subsequent verbs are marked for Customary action; (see pp. 286-7) the Verbal Concordial prefix to these verbs marked for Customary action is obligatorily deleted.

mùùti ɔ̀sikà tàakulɔ̀ lìlù.
1s+PRES+take knife CUST+cut yam
'I use a knife to cut the yam with.'
èèye lɛna tààku.
2s+PRES+buy meat CUST+chew
'You buy meat in order to eat it.'
ùùyu sìka teete ɔ.
3s+PRES+steal money CUST+give you
'He steals money to give to you.'
bɔ̀ɔ̀bla kutu tààfwìɔ.
1p+PRES+make soup CUST+drink
'We are making soup to eat.'

This rule is referential, and does not depend on whether the verb is marked for the Modality of Progressive.

Hence, the sentence

bààŋwa animì teete mà.

3p+PRES+cook rice CUST+give them

'They cook rice to give them.'

is acceptable if it refers to a customary action, as in

bààŋwa animì teete mà uwi biara.

'They always cook rice to give them.',

but is not usually acceptable if it refers solely to an action that is taking place at the same time that the speaker is talking,

*bààŋwa animì teete mà ɔ̀fayĩ̀.

*'They cook rice to give them now.',

in which case

bààŋwa animì bèetè mà ɔ̀fayĩ̀.

'They are cooking rice and giving it to them now.'

is preferred. The obverse is also true, and a sentence like

*bààŋwa animì bèetè mà uwi biara.

*'They are always cooking rice and giving it to them.'

is also not acceptable. The distinction can be made a bit clearer if we look at a verb like bɔda 'to hold', which can occur either in the Simple Present or in the Present Progressive. When it occurs in the Simple Present, thereby indicating that the action of the verb is not customary or habitual, subsequent verbs in serial construction are also in the Present,

ǹda ɔfɛ mɔ̀ɔ̀ni ntu.
1s+PRES+hold calabash 1s+PRES+drink water
'I'm holding a calabash and drinking water.',

but when it occurs in the Present Progressive, then subsequent verbs must be marked for Customary action,

mɔ̀ɔ̀da ɔfɛ tàani ntu.
1s+PRES+PROG+hold calabash CUST+drink water
'I hold a calabash to drink water from.'

Serial verb constructions and buti 'to take'. The verb buti 'to take' is probably the commonest of the verbs which are found in serial verb constructions, where it is frequently used to give the implication of deliberate, intended action. This is clearly seen if we compare the following sentences, líbìlè lɛ̀cami.

1s+PAS+break dish

'I broke a dish.'

líbìlè lɛ̀cami ku lɛ̀tabi.

1s+PAS+break dish with stone

'I broke a dish with a stone.',

where the act of breaking might have been either accidental or deliberate, but is left unstated as to which, with the following sentences, which contain a serial construction,

lítì lɛ̀cami líbìlè.

1s+PAS+take dish 1s+PAS+break

'I took a dish and broke it.'

lítì lɛ̀tabi líbìlè lɛ̀cami.

1s+PAS+take stone 1s+PAS+break dish.

'I used a stone to break the dish.'

Here, there is no possibility that the act of breaking might have been accidental; it could only have been deliberate. Similarly, the sentence

àjwa ɔ́cùlà kɔ̀bɛ̀ nà ɔ̀ja kemo.

Adjuah 3s+PAS+burn fish on fire inside

'Adjuah burned the ~~fire~~ fish in the fire.'

does not assert that Adjuah burnt the fish deliberately, while the use of buti 'to take' in a serial construction does,

àjwa útì kɔ̀bɛ̀ ɔ́cùlà nà ɔ̀ja kemo.
Adjuah 3s+PAS+take fish 3s+PAS+burn in fire inside
'Adjuah took the fish and burned them in the fire.'

In some cases, where the notion of deliberate action is not perhaps appropriate, buti is used as sort of an intensifier, as in

lítì ɔ̀nàncwi líbòkù mɛ́.
1s+PAS+take cow 1s+PAS+bring here
'I took a cow and brought it here.'

The verb buti 'to take' can collocate with a great many other verbs in serial verb constructions, apparently with very few restrictions, as the following representative list (which my informant produced spontaneously within under three minutes) can testify; all verbs are in the Affirmative Simple Past, as elicited.

lítì ... lívò	I borrowed without permission
lítì ... lítè	I gave

lítì ... lɛ́và	I lay on the ground
lítì ... lɛ́tɔ̀ŋkù	I sent ahead
lítì ... lɛ́blà	I used in making
lítì ... lɛ́cà	I put inside
lítì ... lísaŋkù	I sent with
lítì ... lɛ́sìàkù	I sent after
lítì ... límɛ̀nè	I posted
lítì ... lílè	I shared
lítì ... lɛ́sù	I revealed
lítì ... lɛ́kpàlà	I used in sweeping
lítì ... líwì	I poured
lítì ... lífùì	I burned
lítì ... lɛ́kùlɔ̀	I cut
lítì ... lɛ́lɛ̀	I erected
lítì ... lɛ́mánà	I glued
lítì ... lɛ́mànà	I tied (e.g., scarf, wrap)
lítì ... línyìmì	I tied together
lítì ... lífìè	I used in catching

If the verb following buti has an object, then the object of buti is the instrument used in performing the action of the second verb,

lítì ɔ̀sikà lɛ́kùlɔ̀ lìlù.
1s+PAS+take knife 1s+PAS+cut yam
'I took a knife and cut the yam.',

but when the second verb has no object, then the object of buti is the entity upon which the action of the second verb is to be performed,

lítì lìlù lɛ́kùlɔ̀.
1s+PAS+take yam 1s+PAS+cut
'I took a yam and cut it.'

Serial verb constructions and bute 'to give'. The verb bute 'to give' also occurs quite frequently in serial constructions, where it and its object denote the person on whose behalf an action is performed, as in

lɛ́blà kutu lítè mùnà bàŋwani.
1s+PAS+make soup 1s+PAS+give my siblings
'I made soup and gave it to my brothers and sisters.'
or 'I made soup to give to my brothers and sisters.'

úsèlà kuye tèèye lɛna tèète mi.
3s+PRES+go market CUST+buy meat CUST+give me
'She goes to market to buy meat to give me.' or
'She goes to market to buy meat for me.'

tàdu bakpɛ tète mà.
2s+IMP+NEG+kill grasscutters 2s+IMP+NEG+give them
'Don't kill grascutters for them.'

Even though bute can take a double object, as in

bétè mà sìka.
3p+PAS+give them money
'They gave them money.',

where the first Noun Phrase functions as an Indirect Object and the second Noun Phrase functions as a Direct Object, bute quite commonly occurs in a serial verb construction with buti 'to take', as in

bétì sìka bétè mà.
3p+PAS+take money 3p+PAS+give them
'They took money and gave it to them.',

avoiding the possibility of ambiguity in sentences like

bútè mɛnsà lɛku.
1p+PAS+give Mensah books

which can be interpreted either as "We gave Mensah's books away" or as "We gave books to Mensah."

Serial verb constructions and butulò 'to surpass'. The verb butulò 'to surpass' is used to express comparative relations of all sorts; it can occur either as the only verb of a sentence or as the final verb in a serial verb construction. In the Baglo dialect, butulò occurs as the only verb of a sentence only when the thing that the subject of the verb butulò is superior in can be expressed as a Nominal group; in this case, the person surpassed is the object of butulò and the thing he's surpassed in is the posessor of kemo 'inside' in the prepositional phrase na ... kemo .

ntulò kwamìnà nà sìka kemo.
1s+PRES+surpass Kwamina in money inside
'I've got more money than Kwamina.
yao utulò kwàku nà àjwi kemo.
Yao 3s+PRES+surpass Kwaku in brains inside
'Yao has more brains than Kwaku.'

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àŋu utulò ò nà bèlòku ku bèbi kemo.
he 3s+PRES+surpass you in wives and children inside
'He has more wives and children than you.'

(If there is no prepositional phrase following the object of butulò , then the superiority is understood to be in numbers.

banabì betulò bèlòkubi.
boys surpass girls
'There are more boys than girls.')

When butulò occurs in a serial verb construction, it always occurs last and is subject to the same constraints that apply to other verbs in serial verb constructions.

kwaku ubo mbo utulò yao.
Kwaku 3s+PRES+have size, 3s+PRES+surpass Yao
'Kwaku is bigger than Yao.'

ádì sìka étùlò amà.
2s+PAS+eat money 2s+PAS+surpass Ammah.
'You spent (or wasted) more money than Ammah.'

àdi sìka t̀èètulò amà.
2s+PRES+eat money – CUST +surpass Ammah.
'You spend (or waste) more money than Ammah.'

kwàsi ùùkeli ùse tèètulò kòjo.

Kwasi 3s+PRES+run race CUST+surpass Kojo

'Kwasi runs a better race than Kojo.'

àlùɔ̀di sìka àluùtulò amà.

2s+FUT+eat money 2s+FUT+surpass Ammah.

'You'll spend (*or* waste) more money than Ammah.'

mààyɔ lìlù mèètulò animì.

1s+CERT+like yam 1s+CERT+surpass rice

'I'll like yam better than rice.'

amà ùladì sìka ùùtulò ò.

Ammah 3s+PRES+NEG+eat money 3s+PRES+NEG+surpass you

'Ammah doesn't spend (*or* waste) as much money
as you.'

lɛ́kùlò lɛna lítè àbèna lítùlò kòjo.

1s+PAS+cut meat 1s+PAS+give Abena 1s+PAS+surpass
Kojo

'I cut more meat to give to Abena than Kojo did.'

Repetition of objects in conjoined sentences. Generally, when a referent is the recipient of the action of more than one verb in a serial construction, there is only one verb in the serial construction, usually the first, which is complemented by a Noun Phrase referring to the referent, and the other verbs whose activity impinge on the referent occur without any object complement.

líyè lɛna lífì lɛ́kù.
1s+PAS+buy meat 1s+PAS+roast 1s+PAS+chew
'I bought meat, roasted it, and ate it.'

?líyè lɛna lífì nì lɛ́kù.
?1s+PAS+buy meat 1s+PAS+roast it 1s+PAS+chew

*líyè lɛna lífì nì lɛ́kù nì.
*1s+PAS+buy meat 1s+PAS+roast it 1s+PAS+chew it

Even in conjoined sentences which do not result in serial constructions, it is a bit unusual for there to be two instances of Noun Phrases referring to a single referent and functioning as objects of verbs; I think that

líyè lɛna lífì lítè yao nà ɔ́kù
1s+PAS+buy meat 1s+PAS+roast 1s+PAS+give Yao and 3s+PAS+chew
'I bought meat, roasted it, and gave it to Yao and he ate it.'

is considered stylistically superior to

> líyè lɛna lífì lítè yao nà ɔ́kù nì.
>
> 1s+PAS+buy meat 1s+PAS+rɔast 1s+PAS+give Yao and 3s+PAS+chew it
>
> 'I bought meat, roasted it, and gave it to Yao, and he ate it.',

although this last would still be acceptable.

Conjoining Entire Sentences

There are five words or phrases commonly used to conjoin entire sentences; these five words or phrases are

nà	and
nsù	but, however
àŋu	then
ŋwa àlɔ̀	therefore, for this reason
aŋu ɔsù	bearing this in mind

In addition, there are two words used for "or"; I will discuss them separately.

There seem to be no co-occurrence restrictions on tense or aspect when two or more declarative sentences are conjoined,

lɛ́jì lɛna nà bɔ̀lubò bɔ̀kù.kɔ̀nàdì.

1s+PAS+fry meat and 1p+FUT+come INF+chew tomorrow

'I fried meat and we'll eat it.tomorrow.'

ɔ́flʋ̀, nsù ŋwa kɔ̀nʋ kútédù.

3s+PAS+jump but his hand KO+PAS+NEG+reach.

'He jumped up, but he couldn't reach it.'

kɔ̀fi úbúlì nà ɔ́fɛ̀ kɔnu.

Kofi 3s+PAS+fall-down and 3s+PAS+break arm

'Kofi fell and broke his arm.'

útì lɛdi tɛ mi nà úkɛ̀lì ɔ́trɔ̀.

3s+PAS+take something CUST+give me and 3s+PAS+run
    3s+PAS+depart

'She gave me something and ran away.'

When two affirmative imperative sentences are conjoined with na 'and', the first remains in the imperative while the verb of the second changes to a tense which appears to be the Subjunctive.

ti ɔ̀sikà n'ɛkurɔ ujì ɔ́mɔ̀ mɛ́ ŋ́kɛ́

2s+IMP+take knife and+2s+SUBJ+cut stick the here Ø

'Take a cutlass and cut the stick here.'

bo vi lɛtɔ ɛ̀tɛ nà ɛ̀ŋwùnì kɔ̀dì ànu.

2s+IMP+come 2s+IMP+cross houses three and
    2s+SUBJ+turn eating hand

'Go past three houses and then turn right.'

I have no examples of the conjunction of two or more negative imperatives except in serial constructions, nor have I any examples of the conjunction of two or more questions except in serial constructions.

On a purely impressionistic basis, it seems that Buɛm uses inter-sentential conjunctions rather more frequently than does English; however, much more study is needed on the topic of use of conjunctions.

The Disjunctive Conjunctions

In the Baglo dialect, there are two conjunctions, ìyɛ and mùnù , which are approximately equivalent to the "exclusive 'or'" of English; ìyɛ is used to conjoin declarative or imperative sentences or parallel structures within declarative or imperative sentences and, under certain conditions, can also conjoin questions or parallel structures within questions. mùnù , on the other hand, can conjoin only questions or parallel structures within questions. The structures that ìyɛ and mùnù can conjoin are:

i. Entire sentences
ii. Noun Phrases functioning as objects of a verb
iii. Noun Phrases functioning as subjects of a verb
iv. Prepositional Phrases, and
v. Adverbials,

and the rule governing disjunctive conjunction is as follows: in declarative or imperative sentences, ìyɛ intervenes between each pair of structures to be conjoined; in questions, however, either ìyɛ or mùnù intervenes between each pair of structures to be conjoined except for the final pair, which can be conjoined only by mùnù .

Conjunction of entire sentences. The following sentences illustrate the use of ìyɛ and mùnù in conjoining entire sentences; as far as I can tell, there are no restrictions on tenses or aspects.

éɲyì ɔkɔ ìyɛ éténɲyi ɔkɔ.
2s+PAS+excrete lie or 2s+PAS+NEG+excrete lie
'Either you told a lie or you didn't.'
éɲyì ɔkɔ mùnù éténɲyi ɔkɔɔ?
2s+PAS+excrete lie or 2s+PAS+NEG+excrete lie?
'Did you tell a lie or didn't you?'
ùèye kemu ìyɛ ùàbla ajuma nà ɔma η kemo.
3s+CERT+buy farm or 3s+CERT+do work in town inside
'Either he'll buy a farm or he'll do work in town.'
ùèye kemu mùnù ùàbla ajuma nà ɔma η kemɔo?
3s+CERT+buy farm or 3s+CERT+do work in town inside?
'Will he buy a farm or will he work in town?'
ti lilu lέmɔ̀ te mi ìyɛ tesè.
2s+IMP+take yam that 2s+IMP+give me or 2s+IMP+GO+go
'Take that yam and give it to me or leave.'

te mi sika ɔ́mɔ̀ ìyɛ màadù ɔ.
2s+IMP+give me money that or 1s+CERT+kill you
'Give me the money or I'll kill you.'

Conjunction of Noun Phrases as subjects of a verb. When the subject of a Verb Phrase consists of two or more Noun Phrases conjoined by either ìyɛ or mùnù , the Relative Verb forms must be used. The "right-most" concord, as described on pp. 372 ff , does not apply.

ɔga ɔ́mɔ̀ ìyɛ àlà ɔ̀tìnane ɔ́mɔ̀ mukìsi mi.
chief that or thing teacher that REL+PRES+hate
me
'Either the chief or the teacher hates me.'
ɔga ɔ́mɔ̀ mùnù àlà ɔ̀tìnane ɔ́mɔ̀ mukìsi mii?
chief that or thing teacher that REL+PRES+hate
me?
'Does either the chief or the teacher hate me?'
*ɔga ɔ́mɔ̀ ìyɛ àlà ɔ̀tìnane ɔ́mɔ̀ ùukìsi mi.
*chief that or thing teacher that 3s+PRES+hate me
*ɔga ɔ́mɔ̀ ìyɛ àlà ɔ̀tìnane ɔ́mɔ̀ bèekìsi mi.
*chief that or thing teacher that 3p+PRES+hate me

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mùnà àti ìyɛ mùnà uni nébò mɛ́.
my father or my mother REL+PAS+come here
'Either my mother or my father came here.'
*mùnà àti ìyɛ mùnà uni úbò mɛ́.
*my father or my mother 3s+PAS+come here
*mùnà àti ìyɛ mùnà uni bébò mɛ́.
*my father or my mother 3p+PAS+come here

Conjunction of Noun Phrases as objects of a verb. When the object of a verb consists of two or more Noun Phrases conjoined by either ìyɛ or mùnù, the Noun Phrase objects may be fronted optionally, presumably for emphasis. Any verb tense may be used.

ɔ̀ɔwìà lìlù ìyɛ animì.
3s+PRES+seek yam or rice
'She's looking for either yam or rice.'
lìlù ìyɛ animì n'ɔ̀ɔwìà.
yam or rice that 3s+PRES+seek
'It's either yam or rice that she's seeking.'

bɔ̀lɔ̀fwìɔ àkɔkɔ kutu ìyɛ èse kutu.

1p+FUT+slurp chicken stew or goat stew

'We'll eat either chicken stew or goat stew.'

àkɔkɔ kutu ìyɛ èse kutu nà bɔ̀lɔ̀fwìɔ.

chicken stew or goat stew that 1p+FUT+slurp

'It's either chicken stew or goat stew that
we'll eat.'

bísèlà borada mùnù lisemii?

2p+PRES+go Borada or Teteman?

'Are you going to Borada or to Teteman?'

borada mùnù lisemi nà bísèlàà?

Borada or Teteman that 2p+PRES+go?

'Is it to Borada or to Teteman that you're going?'

mùnà ule ɔ̀ɔ̀yɔ kɔdi kɔ́mɛ̀ ìyɛ kɔdi kɔ́nvɔ̀ ìyɛ
kɔdi kɔ́njɛ̀.

my wife 3s+PRES+like cloth this or cloth that or
cloth yonder

'My wife wants either this cloth, that cloth,
or the other one.'

Conjunction of Noun Phrases as objects of prepositions.

ìyɛ and mùnù can be used to conjoin two or more Noun Phrases which are the objects of a preposition.

ɔ̀ɔ̀bla mi nà lɛ́nù ŋ̀ nà hohoi ìyɛ jásìkàn.
3s+PRES+make me that 1s+PAS+see him in Hohoe
or Jasikan
'It seems to me that I saw him in either Hohoe
or Jasikan.'

úkpò kù kwèsi ìyɛ kwamìnà.
3s+PAS+fight with Kwasi or Kwamina
'He fought with either Kwasi or Kwamina.'

úklù lìlù lɛ́nvɔ̀ kù ɔ̀klantìɛ̀ ìyɛ ɔ̀sikà.
3s+PAS+cut yam that with cutlass or knife
'He cut that yam with either a cutlass or a knife.'

The use of ìyɛ and mùnù in questions. mùnù is always used to conjoin the final pair of Noun Phrases in a question; earlier pairs of Noun Phrases, however, can be conjoined by either mùnù or ìyɛ in questions.

ɔ̀ɔwìà lìlù ìyɛ animì mùnù ɔ̀bàncii?

ɔ̀ɔwìà lìlù mùnù animì mùnù ɔ̀bàncii?

3s+PRES+seek yam or rice or cassava?

'Is she looking for yam, for rice, or for cassava?'

àkɔkɔ kutu ìyɛ èse kutu mùnù kɔbɛtu nà bɔ̀lɔ̀fwìɔɔ?

àkɔkɔ kutu mùnù èse kutu mùnù kɔbɛtu nà bɔ̀lɔfwìɔɔ?

chicken stew or goat stew or fish-stew that
    1p+FUT+slurp?

'Is it chicken stew, goat stew, or fish stew
    that we'll eat?'

mùnà àti ìyɛ mùnà uni mùnù ùcwɛdi mámà nébò mɛ́ɛ́?

mùnà àti mùnù mùnà uni mùnù ùcwɛdi mámà nébò mɛ́ɛ́?

my father or my mother or person other REL+PAS+come
    here?

'Did my mother or my father or anybody else
    come here?'

Sequence of Tenses

The tense of the verbs in an embedded sentence is conditioned by the relationship between the time of the action of the embedded sentence and the time of the action of the matrix sentence. The following principles govern the sequence of tenses in complex sentences:

i. If the action of the embedded sentence takes place at the same time as the action of the matrix sentence, and the time of the action of the matrix sentence is not the future, then the verbs of the embedded sentence are in the Present tense and the verbs of the matrix sentence are in the Present tense if the action is still continuing; otherwise, the verbs of the matrix sentence are in the Past. It should be noted, however, that the Simple Present tense may be used in the embedded sentence only if the action of the embedded sentence is still going on.

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mʊ̀utè mà lằgulabi ɔ́sìka bàànwa kana.

1s+PRES+give them money because 3p+PRES+cook
porridge

'I'm giving them money because they are
cooking porridge.'

lítè mà lìgulabi ɔ́sìka bàànwa kana.

1s+PAS+give them money because 3p+PRES+cook
porridge

'I gave them money because they were cooking
porridge.'

mùnà ubi ɔ̀ɔ̀ma ɔ́sìka ŋ̀kwɛni ũ.

my baby 3s+PRES+laugh because 1s+PRES+carry him

'My baby is laughing because I'm carrying him
piggy-back.'

mùnà ubi ɔ́mà ɔ́sìka mɔ̀ɔ̀kwɛni ũ.

my baby 3s+PAS+laugh because 1s+PRES+carry him

'My baby laughed because I was carrying him
piggy-back.'

*mùnà ubi ɔ́mà ɔ́sìka ŋ̀kwɛni ũ.

ii. If the action of the embedded sentence takes place before the action of the matrix sentence, and the time of the action of the matrix sentence is not the future, then the verbs of the embedded sentence are almost invariably in the Past Progressive (if the verbs are in the affirmative), and the verbs of the matrix sentence are in the Present if the action of the matrix sentence is still continuing; otherwise, the verbs of the matrix sentence are in the Simple Past.

mùutè mà lìgulabi ɔ́sìka báaŋwa kana.
1s+PRES+give them money because 3p+PAS+PROG+coɔk porridge
'I'm giving them mɔney because they have cooked porridge.'

lítè mà lìgulabi ɔ́sìka báaŋwa kana.
1s+PRS+give them money because 3p+PAS+PROG+cook porridge
'I gave them money because they had cooked porridge.'

Occasionally, the Simple Past is used in the embedded sentence; however, I feel that this occurs primarily in casual speech, and even then only rarely.

?mùutè mà lìgulabi ɔ́sìka báŋwà kana.

?1s+PRES+give them money because 3p+PAS+cook porridge

?'I'm giving them money because they cooked porridge.'

iii. If the time of the action of the matrix sentence is in the future, then the tensesof the verbs in both the matrix sentence and the embedded sentence are the same as they would be if all the sentences were independent sentences; however, if the time of the embedded sentence is the future, then more often than not the Future Certainty is used rather than the Simple Future, at least in its reduced forms.

mèetè mà lìgulabi ɔ́sìka báŋwà kana.

1s+CERT+give them money because 3p+PAS+cook porridge

'I'll give them money because they cooked porridge.'

mèetè mà lìgulabi ɔ́sìka bààŋwa kana.

1s+CERT+give them money because 3p+PRES+cook porridge.'

'I'll give them money because they are
cooking porridge.'

mèetè mà lìgulabi ɔ́sìka bàlubò kana bɔ̀ŋwa.

1s+CERT+give them mɔney because 3p+FUT+come
porridge INF+cook

'I'll give them money because they'll cook
porridge.'

mèètè mà lìgulabi ɔ́sìka bàaŋwà kana.

1s+CERT+give them mɔney because 3p+CERT+cɔɔk
porridge.'

'I'll give them money because they'll cook
porridge.'

Similarly, if the time of the action of the embedded sentence is in the future, all verbs have the same tenses that they would have in independent sentences.

lítè mà lìgulabi ɔ́sìka bàlubò kana bɔ̀ŋwa.

1s+PAS+give them mɔney because 3p+FUT+come
porridge INF+cook

'I gave them mɔney because they will cɔɔk
porridge.'

lítè mà lìgulabi ɔ́sìka bátáŋwa kana.
1s+PAS+give them money because 3p+GO+cook
porridge
'I'gave them money because they are/were
going to cook porridge.'

iv. Notwithstanding the above, if the verb of the matrix sentence entails a sentential complement whose verbs must be in the Subjunctive, then the verbs of the embedded sentence will be in the Subjunctive. (See the following section.)

Sentences as Complements

There is a small number of verbs which take subordinate sentences as their complements. In most cases, these subordinate sentences have their verbs in the Subjunctive, and in some cases,,the subordinate sentences are introduced by kà 'that'. As far as I can determine, the only verb, other than those introducing indirect discourse, which is complemented by a subordinate sentence not in the Subjunctive is bɔ̀dìa 'to be good':

ɔ̀dìa bu kà amà ɔ́ŋwà bùà adilà.
3s+PRES+be-good us that Ammah 3s+PAS+cook our
food
'It's good for us that Ammah cooked our food.'
ɔ̀dìa bu kà amà ùàŋwa bùà adilà.
3s+PRES+be-good us that Ammah 3s+CERT+cook
our food
'It's good for us that Ammah will cook our
food.'

Two verbs, bɔ̀bɔ̀mɔdi 'to try' and bɔkana 'to be able', can be complemented either by an Infinitival Phrase or by a subordinate sentence in the Subjunctive whose underlying subject is identical to the subject of the verb of the matrix sentence:

mɔbɔ̀mɔdi lìtià lɛ̀lɛ̀mì lɛdi.

1s+PRES+try 1s+SUBJ+learn Lɛlɛmi language

'I'm trying to learn the Lɛlɛmi language.'

kwàmi ɔbɔ̀mɔdi ùtià lɛ̀lɛ̀mì lɛdi.

Kwame 3s+try 3s+SUBJ+learn Lɛlɛmi language

'Kwame is trying to learn the Lɛlɛmi language.'

mɔbɔ̀mɔdi bɔtià lɛ̀lɛ̀mì lɛdi.

1s+PRES+try INF+learn Lɛlɛmi language

'I'm trying to learn the Lɛlɛmi language.'

One verb, bɔyà 'to permit', is complemented by an animate object followed by a subordinate sentence in the Subjunctive:

ɔ́yà mi h̀ɛ̀bla.

3s+PAS+allow me 1s+SUBJ+work

'He let me work.'

mɔ̀ɔ̀ya kɔ̀fi ùŋwà kamu.

1s+PRES+permit Kofi 3s+SUBJ+harvest rice

'I'm letting Kofi harvest rice.'

There are several other verbs which take sentences in the Subjunctive and introduced by kà ; these verbs include

bɔyɔ	'to like'
bɔ̀wl̀à	'to want'
bɔfɔ	'to be necessary'
bɔdi	'to be necessary'
bɔhia	'to be important',

as exemplified by:

mɔ̀yɔ kà lìtià àlà.
1s+PRES+want that 1s+SUBJ+learn things
'I want to learn things.'

mɔ̀yɔ kà kòfi ùtià àlà.
1s+PRES+want that Kofi 3s+SUBJ+learn things
'I want Kofi to learn.'

ɔhia kà kòfi ùtià àlà.
3s+PRES+be-important that Kofi 3s+SUBJ+learn things
'It's important for Kofi to learn.'

Indirect Discourse

All four types of sentence--declarative, interrogative, imperative, and exclamatory--can occur as the complement of a verb of speaking, hearing, or other mental activity, although there are restrictions as to which type of sentence can occur as the complement of particular verbs and, in addition, there are restrictions on the ordering of the verbs of speaking depending on the type of sentence which complements them. In general, the principles governing sequence of tenses in embedded sentences, as described on pp. 409 ff , apply to embedded sentences in indirect discourse as well.

Indirect Statements. When a declarative sentence follows a verb of perception such as bɔnu 'to see', bunu 'to hear', bɔti 'to know', àjwi buti 'to have in mind', etc., thereby forming an indirect statement, it is introduced by ka .

lɛ́nù ka mùnà ùlɛni ùùye lɛna.

1s+PAS+see that my wife 3s+PRES+buy meat

'I saw that my wife was buying meat.'

lɛ́nù ka mùnà ùlɛni úuye lɛna.

1s+PAS+see that my wife 3s+PAS+PROG+buy meat

'I saw that my wife had bought meat.'

únù ka lɛ̀lɛ̀dì lɛ́blà "kpáà."

3s+PAS+hear that thing+certain LE+PAS+make "Bang!"

'She heard something go "Bang!"'

nji ka àcampɔ̀ŋ ùàbla ŋwà kàlàbla.

1s+PRES+know that Acheampong 3s+CERT+do his work

'I know that Acheampong will do his work.'

nji ka àawìà fùà lɛku.

1s+PRES+know that 2s+PRES+seek your books

'I know that you're looking for your books.'

lɛ́tíà ka bàlɛ̀mì bàca Hohoe kù kɛ̀jɛ̀bì ǹtɛ̀.

1s+PAS+learn that Buɛm 3p+PRES+live Hohoe and
    Kadjebi between

'I learned that the Buɛm live between Hohoe
    and Kadjebi.'

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àtanu ka kutu kɔ́mɛ̀ kúbiee?

2s+PAS+NEG+see that soup that KO+PAS+get-spoiled?

'Didn't you see that the soup got spoiled?'

There are three verbs of speaking which are commonly used before indirect statements: bɔ̀tɛ̀mì 'to speak', bɔsu 'to tell', and bɔni 'to say'. The verb bɔtɛmi 'to speak' cannot immediately precede an indirect statement, but can be used in a serial construction with other verbs of speech. The verb bɔsu 'to tell' can occur either in a serial construction with other verbs of speech or by itself; if bɔsu occurs by itself, it must be followed by an animate object and the indirect statement must be introduced by ka .

básù mà ka lɛ́ɛŋwa animì.

3p+PAS+tell them that 1s+PAS+PROG+cook rice

'They were told that I had cooked rice.'

bɔ̀ɔ̀su bùlà bakpana ka kòfi ɔ́cà eli ɛ̀lɔ̄.

1p+PRES+tell our friends that Kofi 3s+PAS+score
heads five

'We are telling our friends that Kofi scored
five goals.'

The verb bɔni 'to say' is the commonest of the verbs of speaking, occurring before the vast majority of indirect statements, either by itself or in a serial construction. It takes no object other than the indirect statement itself, which is not introduced by any conjunction.

yao ɔ́nì bàtánù ŋ̀.
Yao 3s+PAS+say 3p+PAS+NEG+see him
'Yao said they didn't see him.'

bánì mànà bàti básì àsànti kama.
3p+PAS+say their fathers 3p+PAS+come-from
Asanti back
'They say their fathers came from in back
of the Ashanti.'

ǹtánì èèye kɔdi kɔ́nvɔ̀.
1s+PAS+NEG+say 2s+PRES+buy cloth that
'I didn't say you were buying that cloth.'

Generally, verbs of speaking preceding an indirect statement are grouped together in a serial construction, with the verb bɔni 'to say' coming last. So far, I have identified the following combinations:

i. bɔ̀tɛ̀mì bɔni

bátɛ̀mì bánì báwùrɔ̀ ŋwa kàlàbla.

3p+PAS+speak 3p+PAS+say 3p+PAS+finish his work

'They said that they finished his work.'

ii. bɔsu bɔni

básù ŋ̀ bánì báàwùrɔ̀ ŋwa kàlàbla.

3p+PAS+tell him 3p+PAS+say 3p+PAS+PROG+finish his work

'They told him they'd finished his work.'

iii. bɔ̀tɔ̀mì bɔsu bɔni

bátɛ̀mì básù ŋ̀ bánì báàwùrɔ̀ ŋwa kàlàbla.

3p+PAS+speak 3p+PAS+tell him 3p+PAS+say 3p+PAS+PROG+finish his work

'They spoke to tell him that they had finished his work.'

Indirect Questions. Indirect questions follow bɔsu 'to tell', which can occur either by itself or in a serial construction following bɔni 'to say'.

When a yes-no question is embedded to form an indirect question, it loses the characteristic lengthening of the final syllable and is introduced by si 'if'.

áabla kutuu?

2s+PAS+PROG+make stew?

'Have you made stew?'

ɔ́sù si áabla kutu.

3s+PAS+ask if 2s+PAS+PROG+make stew

'She asked if you'd made stew.'

ŋwa èse ɔ̀ɔkù bùlà ɔ̀ntaa?

his goat 3s+PRES+chew our corn?

'Is his goat eating our corn?'

ɔ́nì ɔ́sù mi si ŋwa èse ɔ̀ɔku bùlà ɔ̀nta.

3s+PAS+say 3s+PAS+tell me if his goat 3s+PAS+chew
out corn

'He asked me if his goat was eating our corn.'

A question which uses an interrogative word as a direct question also loses the characteristic lengthening of the final syllable when it becomes embedded; otherwise there is no change, other than those conditioned by sequence of tenses, when it becomes embedded.

bi n'aayɔɔ?
what that'2s+PRES+want?
'What do you want?'

lɛ́nì lɛ́sù bi n'ààyɔ.
1s+PAS+say 1s+PAS+ask what that'2s+PRES+want
'I asked what you wanted.'

ɔ̀ma nèèboo?
who REL+PAS+come?
'Who came?'

ɔ̀ɔnì ɔ̀ɔ̀su ɔ̀ma nèèbo.
3s+PRES+say 3s+PRES+ask who REL+PAS+come
'He's asking who came.'

bi ɔsu bɔ̀ɔ̀bla bùlà kàlàbla na kalɛ kánvɔɔ?
what reason 1p+PRES+make our work in way that?
'Why do we do our work like that?'

mɔ̀ɔnì mɔ̀ɔ̀su bi ɔsu bɔ̀ɔ̀bla bùlà kàlàbla na kalɛ kánv
1s+PRES+say 1s+PRES+tell what reason 1p+PRES+make
our work in way that
'I'm asking why we do our work like that.'

Indirect commands. Indirect commands follow bɔsu 'to tell' and are introduced by nà ; the verbs of the indirect command are in the Subjunctive. It is likely that the underlying structure of an indirect command is a declarative sentence in the Subjunctive rather than an imperative; however, for present purposes, the underlying source is irrelevant. The following sentences will illustrate indirect commands.

ɔ́sù mà nà bɛ̀bɔ̀.
3s+PAS+tell them that 3p+SUBJ+come
'He told them to come.'
ɔ́sù bàlà ɔ̀ti ħà ùbɔ̀.
3s+PAS+tell their father that 3s+SUBJ+come
'He told their father to come.'
ɔ́sù mi nà lìbɔ̀.
3s+PAS+tell me that 1s+BUBJ+come
'He told me to come.'

I have not yet been able to determine whether sentences like

?ɔ́sù nà bàlà ɔ̀ti ùbɔ̀.

?3s+PAS+tell that their father 3s+SUBJ+come

?'He said that their father should come.'

or

?ɔ́sù kɔ̀fi nà ŋwa ɔ̀ti ùbɔ̀.

?3s+PAS+tell Kofi that his father 3s+SUBJ+come

?'He told Kofi that his father should come.',

are acceptable, although I feel that the latter sentence would be much more acceptable than the former.

Indirect interjections. Indirect interjections generally follow bɔni 'to say'; they are not introduced by any conjunction.

ɔ́nì "kpam!"

3s+PAS+say "Bang!"

'She said "Bang!"'

Subordinate Clauses

I have identified five types of subordinate clause:

i. the "if" clause,
ii. the causal clause,
iii. the time clause,
iv. the purpose clause, and
v. the "as if" clause.

By far, the commonest types of subordinate clause are the causal clause, the time clauses, and one sub-type of "if" clause, the general "if" clause; the other types of subordinate clause are rather rare.

"If" clauses. All "if" clauses are introduced by si (by sa , in the Okajakrɔm dialect of Lɛ̀fana) 'if', occurring either by itself as the only subordinate conjunction or with some other connective. There are three types of "if" clause:

i. the general "if" clause, introduced by si alone,

ii. the contrary-to-fact clause, introduced by si , with the main clause introduced by ŋ́kà 'then', and

iii. the "only if" clause, which is introduced by ǹtu si 'only if'; the main clause is often introduced by ásà 'before'.

The general "if" clause is by far the commonest of the "if" clauses and expresses simple cause-and-effect relationships. Like other subordinate clauses, general "if" clauses usually precede the main clause; however, general "if" clauses may follow the main clause optionally.

T80 $\text{si} + \text{Sent}_1 + \text{Sent}_2 \overset{\text{opt}}{\Longrightarrow}$
$\text{Sent}_2 + \text{si} + \text{Sent}_1$
si ààyɔɔ̀, àkana bùye mùnà avalà.
if 2s+PRES+want, 2s+PRES+can INF+buy my eggs
'If you want to, you can buy my eggs.' or
àkana bùye mùnà avalà sì ààyɔ.
2s+PRES+can INF+buy my eggs if 2s+PRES+want
'You can buy my eggs if you want to.'

Any tense or aspect form can be used in a general "if" clause; however, if the "if"cclause refers to a future event, it seems that the Future Certainty is used more frequently than the General Future, although both

si jɔrj ùaŋwà kutu, ɔ̀lubò buye kù.
if George 3s+CERT+coɔk stew, 3s+FUT+come
INF+buy it
'If George cooks stew, she will buy sɔme.'

and

si jɔrj ɔ̀lubò bɔŋwa kutu, ɔ̀lubò buye kù.
if George 3s+FUT+come INF+cook stew,
3s+FUT+come INF+buy it
'If George cooks stew, she will buy some.'

are acceptable. General "if" clauses can be further exemplified by the following:

si lívù sìka ni, àlùbɔ̀ti.
if 1s+PAS+steal money comma, 2s+FUT+INF+knɔw
'If I stɔle mɔney, you'll know it.'
si lívù sìka ni, átì.
if 1s+PAS+steal mɔney,comma, 2s+PAS+know
'If I stole mɔney, you knew it.' or

'When I stole money, you knew it.'

si f'ɔ̀ŋwani úkpl̀ ni, àkana n'ѐti ulɔ̀kudi.

if your+brother 3s+PAS+die comma, 2s+PRES+can

na+2s+SUBJ+marry woman+certain

'If your brother is dead, you can marry

his wife.'

si àanyà ni, nyáà ɔ̀ɔŋwà ɔ̀gbà alɔ.

si 2s+PRES+trod comma, then 2s+PRES+cut

foot bottom

'If you step on it, then it'd cut the soles

of your feet.' or

'When you step on it, it cuts the soles of

your feet.'

Finally, the general "if" clause, with appropriate negation, functions as the equivalent of the English "unless" clause in Lɛ̀lɛmi.

si ѐlѐye àdìla, kɔka kɔ̀lùɔdu bu.

if 2s+FUT+NEG+buy food, hunger KO+FUT+bite us

'If you don't buy food, we'll be hungry.' or

'Unless you buy Food, we'll be hungry.'

Lɛ̀fana speakers prefer to use the Twi word jisɛ 'unless' instead in order to express the notion of "unless."

ǰisɛ àlùye àdìla, kɔka kɔ̀lùɔdu bu.
unless 2s+FUT+buy food, hunger KO+FUT+bite us
'Unless you buy food, we'll be hungry.'

The contrary-to-fact clause seems to occur only sentence initially. Within the contrary-to-fact clause itself, I have noted the use only of the Simple Past tense, with or without infinitival emphasis; within the main clause, I have noted the use only of the General Future and the Simple Past tenses, although given a suitable context I suspect that the Present tense might also be used.

T81 SD: si + X + TN + Y + ŋ́kà + Z
SC: si + X + PAS + Y + ŋ́kà + Z
si líyù sìka ni, ŋ́kà ɔ́tì.
if 1s+PAS+steal money comma, then 3s+PAS+know
'If I had stolen any money, then he would have known about it.'

si buye nà úyè lìlù, ŋ́kà nnuyu nì

if INF+buy that 3s+PAS+buy yam, then
1s+FUT+steal it

'If she had bought yam, then I'd steal it.'

si bɔŋwa nà ɔ́ŋwà kutu, ŋ́kà lɛ́dì kù.

if INF+cook stew that 3s+PAS+cook stew, then
1s+PAS+eat it

'If she had cooked stew, then I'd have eaten
eat.'

si bùbɔ̀ nà úbò, ŋ́kà lɛ́nù ŋ̀.

if INF+come that 3s+PAS+come, then 1s+PAS+see
him

'If he had come, then I would have seen him.'

The aspect of Certainty may not be used in the main clause of a sentence containing a cɔntrary-tɔ-fact clause.

*si líyù sìka ni, ŋ́kà ùàti.

if 1s+PAS+steal mɔney,comma, then 3s+CERT+know

*'If I had stolen money, then he will know it.'

My corpus contains only one instance of an "only if" clause; in this ɔne example, the verb of the subordinate clause is in the Simple Past, while the verb of the main clause is marked for Certainty.

ǹtu si lɛ́ŋwà ni, ásà ùàdi.
only if 1s+PAS+cook comma, before 3s+CERT+eat
'She'll eat only if I cooked.'

The Causal clause. The causal clause is introduced by ɔ́sìka 'because'; like the general "If" clause, the causal clause can either precede or follow the main clause.

T82 ɔ́sìka + Sent$_1$ + Sent$_2$ $\overset{\text{opt}}{\Longrightarrow}$
Sent$_2$ + ɔ́sìka + Sent$_1$

ɔ́sìka líbò, lɛ́nù ŋ̀.
because 1s+PAS+come, 1s+PAS+see him
'Because I came, I saw him.' or
lɛ́nù ŋ̀ ɔ́sìka líbò.
1s+PAS+see him because 1s+PAS+come
'I saw him because I came.'

As far as I can determine, there are no restrictions on the tenses or aspects which can occur in causal clauses

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other than those described under "Sequence of Tenses," pp. 409ff .

ɔ́sìka báaŋwa kana, lítè mà lìgulabi.
because 3p+PAS+PROG+cook porridge, 1s+PAS+give them money
'Because they had cooked porridge, I gave them money.'

ɔ́sìka báŋwà kana, lítè mà lìgulabi.
because 3p+PAS+cook porridge, 1s+PAS+give them money.
'Because they cooked porridge, I gave them money.'

ɔ́sìka bàànwa kana, lítè mà lìgulabi.
because 3p+PRES+cook porridge, 1s+PAS+give them money
'Because they were cooking porridge, I gave them money.'

ɔ́sìka bátáŋwa kana, lítè mààlìgulabi.
because 3p+GO+cook porridge, 1s+PAS+give them money
'Because they're going to cook porridge, I gave them money.'

ɔ́sìka bàtáŋwà kana, lítè mà lìgulabi.
because 3p+PAS+NEG+cɔɔk porridge, 1s+PAS+give them money
'Because they didn't cɔɔk porridge, I gave them mɔney.'

ɔ́sìka bààŋwa kana, mùutè mà lìgulabi.
because 3p+PRES+cook porridge, 1s+PRES+give them money
'Because they're cooking porridge, I'm giving them mɔney.'

ɔ́sìka bààŋwa kana, mèetè mà lìgulabi.
because 3p+PRES+cook porridge, 1s+FUT+give them money
'Because they're cooking porridge, I'll give them money.'

ɔ́sìka bààŋwa kana, nèète mà lìgulabi.
because 3p+PRES+cook porridge, 1s+FUT+NEG+give them mɔney
'Because they're cooking porridge, I'won't give them any money.'

etc.

In addition to the causal clause introduced by ɔ́sìka 'because', it is possible to introduce a causal clause by ńnàka 'although'. Causal clauses introduced by ńnàka 'although' have the same properties as those introduced by ɔ́sìka 'because'; causal clauses introduced by ńnàka 'although', however, occur quite infrequently.

> ńnàka báaŋwa kana, lítè mà lìgulabi.
> although 3p+PAS+PROG+cook porridge,
> 1s+PAS+give them money
> 'Although they cooked porridge, I gave them money.'

The time clause. There are two types of time clause:

i. the "as" clause, used for actions taking place at the same time as the action of the main clause and which is introduced by ka 'when, while, as', and

ii. the "before" clause, used for actions taking place before the action of the main clause and which is introduced by ásà nà or, depending on idiolect, ánsɛ̀ nà 'before'.

There are no "after" clauses in Buɛm; instead, the earlier event goes into a "before" clause, and the later event goes into a main clause, so that the Buɛm equivalent of "After he saw me, he went home." would be

> ásà nà úsè kadruì, ɔ́nù mi.
> before that 3s+PAS+go home, 3s+PAS+see me
> 'Before he went home, he saw me.'

Generally, "as" clauses and "before" clauses both precede the main clause; however, both may follow the main clause as an optional, stylistic variant.

$$\text{T83}\quad \left\{\begin{matrix}\text{ka}\\ \text{ásà nà}\end{matrix}\right\} + \text{Sent}_1 + \text{Sent}_2 \xRightarrow{\text{opt}} \text{Sent}_2 + \left\{\begin{matrix}\text{ka}\\ \text{ásà nà}\end{matrix}\right\} + \text{Sent}_1$$

> ɔ́nù mi ásà nà úsè kadruì.
> 3s+PAS+see me before that 3s+PAS+go home
> 'He saw me before he went home.'

There are a number of tense and aspect restrictions involved in the use of time clauses. The tense of "as" clauses must be co-referential with that of the main clause:

i. If the "as" clause is marked for aspect (other than negation) or futurity, then the main clause must also be marked for aspect of for futurity.

ka ùablà kutu, bɔ̀lubɔ̀ animì bɔŋwa.
as 3s+CERT+make stew, 1p+FUT+come rice INF+cook
'As he makes stew, we'll cook rice.'

ka ùablà kutu, busèlà bútáŋwa animì.
as 3s+CERT+make stew, 1p+PRES+go 1p+GO+cook rice
'As he makes stew, we'll go and cook rice.'

ka útábla kutu, bɔ̀lùɔ̀ŋwa animì.
as 3s+GO+make stew, 1p+FUT+cook rice
'While he goes to make stew, we'll cook rice.'

ii. If the "as" clause is in the Present Progressive, then the main clause must be either in the Present or the Simple Past.

ka ɔ̀ɔ̀ŋwa animì, bɔ̀ɔ̀bla kutu.
as 3s+PRES+cook rice, 1p+PRES+make stew
'While she cooks rice, we're making stew.'

ka bàatɛ̀mì bù, bùùnu.

as 3p+PRES+speak-to us, 1p+PRES+hear

'When they speak to us, we listen.'

ka ɔ̀ɔ̀ŋwa animì, bɔ́blà kutu.

as 3s+PRES+cook rice, 1p+PAS+make stew

'While she was cooking rice, we made stew.'

ka bàatɛ̀mì bu, búnù.

as 3p+PRES+speak-to us, 1p+PAS+hear

'While they were talking to us, we listened.'

iii. If the "as" clause is in the past, then the main clause must also be in the past.

ka ɔ́ŋwà animì, bɔ́blà kutu.

as 3s+PAS+cook rice, 1p+PAS+make stew

'While she cooked rice, we made stew.'

ka bátɛ̀mì bù, búnù.

as 3p+PAS+speak-to, 1p+PAS+hear

'When they spoke to us, we listened.'

In addition, the sequence of tenses rules, as discussed on pp 409 ff , apply to "before" clauses.

The purpose clause. Purpose clauses always follow the main clause of the sentence; they are introduced by kànà 'so that' and their verbs are marked for the aspect of Certainty, regardless of the tense of the main clause.

T84 kànà + Sent_1 + Sent_2 =====)
Sent_2 + kànà + Sent_1

líyè lɛna kànà mùnà ubi ùàku.
1s+PAS+buy meat so-that my child 3s+CERT+chew
'I bɔught meat so that my child might eat.'

mùùye lɛna kànà mùnà ubi ùàku.
1s+PRES+buy meat so-that my child 3s+CERT+chew
'I'm buying meat so that my child might eat.'

ǹdubù buye lɛna kànà mùnà ubi ùàku.
1s+FUT+come INF+buy meat so-that my child
3s+CERT+chew
'I'll buy meat so that my child might eat.'

lísèlà kuye ńtéye lɛna kànà mùnà ubi ùàku.
1s+PRES+go market 1s+GO+buy meat sɔ-that
my child 3s+CERT+chew
'I'm going to market tɔ buy meat so that
my child might eat.'

lítɛ̀mì mì mùnà ɛtɛmila kànà bìàti ŋwa kalala.
1s+PAS+tell you my case so-that 2p+CERT+know
his mischief
'I told you my business so that you'd know
of his mischief.'

The "as if" clause. The "as if" clause always follows the main clause of the sentence; it is introduced by ànì si or, depending on the speaker's idiolect, ànì ka 'as if, as though'. The verb of the "as if" clause may be marked for any tense or aspect.

$$\text{T85}\quad \left.\begin{array}{l}\text{ànì si}\\ \text{ànì ka}\end{array}\right\}\ \text{Sent}_1 + \text{Sent}_2 \qquad \text{======)}$$

$$\overset{\leftarrow}{\text{Sent}}_2 + \left\{\begin{array}{l}\text{ànì si}\\ \text{ànì ka}\end{array}\right\} + \text{Sent}_1$$

bɔ̀ɔ̀du bakpɛ ànì si bùùkisì ma.
1p+PRES+kill grasscutters as if 1p+PRES+hate them
'We kill grasscutters as if we hate them.'

use ànì ka kɔka kɔ̀ɔda ũ.
3s+PRES+go as though hunger KO+PRES+sting him
'He looks as though he's hungry.'

ɔ̀ɔdì ànì si ùtádì tɔ kɔbulì kúŋwí méní.
3s+PRES+eat as if 3s+PAS+NEG+eat yet month
one this
'He's eating as though he hadn't eaten for
a month.'

ɔ́dà lɛ̀lɔ̀ ànì si kɔ̀kwà n'úsè.
3s+PAS+hold body as if funeral that+3s+PAS+go
'He dressed up as though it was a funeral
that he was going to.'

ɔ̀ɔtɛ̀mì ànì ka ɔga n'ɔdi.
3s+PRES+speak as if chief that+3s+PRES+be
'He speaks as though he were a chief.'

Juncture phenomenon. There are certain juncture phenomena which can occur when a subordinate clause precedes a main clause. The most common of these juncture phenomena is the insertion of ni ,'the oral comma, at the end of the subordinate clause; this is discussed more thoroughly on pp 445 ff . The next most common juncture phenomenon occurs when the final word of the subordinate clause is a verb whose final syllable is on a Mid tone;

in this case, the final syllable is prolonged and converted to a Mid-Low glide:

si ààyɔɔ̀, àkana n'èti ulɔ̀kudi,

if 2s+PRES+want, 2s+PRES+can that+2s+SUBJ+marry
woman+certain

'If you want to, you can marry his wife.'

There may be other juncture phenomena involved in connection with subordinate clauses; however, these would occur much more infrequently than the two types just mentioned or the absence of any juncture phenomenon.

Part VII. Emphasis

The "Oral Comma," ni

The use of the "oral comma," ni , is by far the commonest means of emphasising or highlighting a Noun Phrase or a subordinate clause; in 60 lines of connected text, ni occurs 33 times. While the use of ni is optional in all cases, there are, for example, relatively few sentence-initial subordinate clauses which lack ni at the end.

ka bɔ̀ta nvɔ̀ ni, aŋu bubàlɛ̀ ŋɔ̀tsìɛ.
when 1p+PRES+rise there ni, then 1p+COME+rest
    Notsie
'When we migrated from there, we came to
    settle at Notsie.'

si àanyà ni, nyáà ɔ̀ɔŋwà ɔ̀gbà alɔ.
if 2s+PRES+tread ni, then 3s+PRES+cut foot
    bottom
'If you stepped on it, it'd cut the sole
    of your foot.'

si f'ɔ̀ŋwani úkpì ni, àkana n'èti ulòkudi.
if your+brother 3s+PAS+die *ni*, 2s+PRES+can
that+2s+SUBJ+take woman+certain
'If your brother is dead, you can marry
his wife.'

The "oral comma", ni , is also used to set off the grammatical subject of the sentence as a sort of appositive, with the approximate translation meaning of "As for ..."

bùlà lɛdi ńvɔ̀ ni, lɛ̀ca nvɔ̀ k'ɔ́mwì.
our language there *ni*, LE+PRES+be-at there
as+today
'As for our language there, it's still
there today.'

àbu bagòlò ni, abu nákpɛ̀ kama.
we Baglos *ni*, we REL+PAS+lag back
'As for us Baglos, we stayed behind.'

ni can also be used to emphasise fronted adverbials.

kɛ̀sia bɔ́sì ni, bɔ́sì àsànti kama kɛ̀siàdì.
where 1p+PAS+come-from *ni*, 1p+PAS+come-from
Ashanti back somewhere

'As for where we come from, we came from
somewhere behind the Ashanti.'

kùkù ni, bèlòku natáàslà ku bànànà kemo.

old-times ni, women REL+PAS+CUST+follow
with men farm

'In the olden days, women used to follow
men to farm.'

aŋu limel̀ lɛ́dì ni, uni kù ɔti bátrɔ̀ bésè kemo.

then day certain ni, mother and father
3p+PAS+depart 3p+PAS+go farm

'Then, on a certain day, the mother and
father left to go to farm.'

Finally, ni is occasionally used at the end of a sentence which makes a definition or which identifies some entity; presumably, ni is used for this instead of the verb bɔdi 'to be'.

ebuo ɔni bádù kafɛ̀ ni.

animal which 3p+PAS+kill antelope ni

'The animal that was killed is an antelope.'

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bɛ̀cwiri bèellè balɛ kù bàfana ntɛ bòwilì ni.
people 3p+PRES+live Santrokofi and Bàfana
between Bowiris ni
'The people whɔ live between the Santrokofi
and the Bàfana are the Bowiri.'

Emphasis of a Noun Phrase

A Noun Phrase is generally emphasised when it is part of the response to a question. To some extent, the form of Noun Phrase emphasis varies with negation; this is discussed on pp. 453ff .

Emphasis of the subject of a verb. To stress the fact that a particular person or thing did or did not perform a particular action, the Relative Verb forms, as discussed on pp. 324 ff , are used, and the examples used to illustrate the Relative Verb forms will also illustrate emphasis of the subject of a verb.

Emphasis of the object of a verb. The object of the main verb of a sentence can be emphasised by "fronting" it, or placing it at the beginning of the sentence, and following the transposed object by na 'that',

1a. àkɔsuà ɔ̀ɔ̣kùlà kɔ̀bɛ̀. + EMPH =======)
Akosuah 3s+PRES+smoke fish
'Akosuah is smoking fish.'

b. kɔ̀bɛ̀ nà àlɔsuà ɔ̀ɔkûlà.

fish that Akosuah 3s+PRES+smoke

'It's fish that Akosuah is smoking.'

2a. mɔ̀ɔ̀yɔ lìgulabi. + EMPH ======)

1s+PRES+like money

'I like money.'

b. lìgulabi nà mɔ̀ɔ̀yɔ.

mɔney that 1s+PRES+like

'It's money that I like.'

3a. bɔ̀lɔ̀ŋwa ɔ̀nta. + EMPH ======)

1p+FUT+harvest corn

'We'll harvest corn.'

b. ɔ̀nta nà bɔ̀lɔ̀ŋwa.

corn that 1p+FUT+harvest

'It's corn that we'll harvest.'

If a verb is capable of taking two objects, then only the second can be frɔnted.

4a. lítè mà ɔku. + EMPH ======)

1s+PAS+give them book

'I gave them a book.'

b. ɔku nà lítè mà.

book that 1s+PAS+give them

'It was a bɔok that I gave them.'

c. *àma nà lítè ɔku.

*they that 1s+PAS+give book

*'It was them that I gave a bɔok to.'

5a. maik ɔ́tìnà frakofo àkɔntà. + EMPH ======)

Mike 3s+PAS+teach Franco+students math

'Mike taught Francɔ students math.'

b. àkɔntà nà maik ɔ́tìnà frankofo.

math that Mike 3s+PAS+teach Franco+students

'It was math that Mike taught Franco students.'

c. *frankofo nà maik ɔ́tìnà àkɔntà.

*Franco-students that Mike 3s+PAS+teach math

*'It was Francɔ students that Mike taught math tɔ.'

For this reason,

gan̠afo ɔga bààlɔ àcampɔ̀η.

Ghana-people chief 3s+PRES+call Acheampong

'Ghana's leader is called Acheampɔng.'

can be considered as deriving from

bààlɔ àcampɔ̀ŋ ganafo ɔga. + EMPH
3p+PRES+call Acheampong Ghana-people chief
'They call Acheampong Ghana's leader.',

while

àcampɔ̀ŋ bààlɔ ganafo ɔga.
Acheampong 3p+PRES+call Ghana-people chief
'Acheampong is called Ghana's leader.'

can be considered as deriving from

bààlɔ ganafo ɔga àcampɔ̀ŋ. + EMPH
3p+PRES+call Ghana-people chief Acheampong
'They call Ghana's leader Acheampong.'

While it is extremely unusual, it is possible for the object of a verb of motion to be fronted.

6a. lɛ́sì àmɛrìkà. + EMPH =====)
1s+PAS+come-from America
'I come from America.'

b. àmɛrìkà nà lɛ́sì.
America that 1s+PAS+come-from
'It's America that I'm from.'

My informants found this quite awkward, however.

In a sentence embodying a serial construction, only the object of the first verb can be fronted.

7a. útì ɔ̀sikà úklò lɛna. + EMPH ======)
3s+PAS+take knife 3s+PAS+cut meat
'She took a knife and cut the meat.'

b. ɔ̀sikà nà útì úklò lɛna.
knife that 3s+PAS+take 3s+PAS+cut meat
'It was a knife she used to cut the meat.'

c. *lɛna nà útì ɔ̀sikà úklò.
*meat that 3s+PAS+take knife 3s+PAS+cut
*'It was meat she used a knife to cut.'

I don't know whether fronting could take place in a compound sentence; however, I strongly doubt that it could.

Negation and Noun Phrase emphasis. It is possible to express the fact that while a particular action may have taken place, it did not involve a particular person or thing; the normal rules for emphasis apply, and either of the negative particles ǹdi or nɛ is inserted immediately before the emphasised Noun Phrase.

ǹdi kɔ̀bɛ̀ nà àkɔsùà ɔ̀ɔkùlà.

not fish that Akosuah 3s+PRES+smoke

'It's not fish that Akosuah is smoking.'

ǹdi lìgulabi nà mɔ̀ɔ̀yɔ.

not money that 1s+PRES+like

'It's not money that I like.'

nɛ ɔ̀nta nà bɔ̀lɔŋwà.

not corn that 1p+FUT+harvest

'It's not corn that we'll harvest.'

nɛ ɔku nà lítè mà.

not book that 1s+PAS+give them

'It wasn't a book that I gave them.'

nɛ kwamì néébɔ̀ mɛ́.

not Kwame REL+PAS+come here

'It wasn't Kwame who came here.'

ǹdi amà mùùfi lilu.

not Ammah REL+PRES+roast yam

'It's not Ammah who's roasting yam.'

ǹdi àma ńtádu kani.

not they REL+GO+kill porcupine

'It's not they who'll go and kill a porcupine.'

Emphasis of a Verb

I discuss the use of infinitives to emphasise the action of a verb on pp. 233 ff

Interrogative Words

There are three kinds of interrogative words:

i. Interrogative pronouns:

ɔ̀ma	'who(m)?'
bi	'what'

ii. Interrogative determiners:

ɛlɛ	'how many?'
ɔ̱̀mɛ́ni	'which?'

and

iii. Interrogative adverbs:

dɛ	'how?'
bi ɔsu	'why?'
lɛma	'why?'
wɛ	'whore?'

These words, or, in the case of the interrogative determiners, the Noun Phrases dominating them, almost always occur sentence-initially, even though their analogs in declarative sentences may occur elsewhere in the sentence. When these interrogative words precede a word beginning with a vowel, an epenthetic n' is inserted, and when ɔ̀ma 'who?' functions as the subject of the sentence, the Relative Verb forms are used.

bi n'ààbla?
what n'+2s+PRES+do?
'What are you dɔing?'

ɔ̀ma nébɔ̀ mɛ́?
who REL+PAS+come here?
'Who came here?'

dɛ bébɔ̀ mɛ́?
how 3p+PAS+come here?
'How did they get here?'

ɔ̀ma bádù?
whɔm 3p+PAS+kill?
'Whom did they kill?'

bì ɔsu n'éyù mùnà kɔdii?

what cause n'+2s+PAS+steal my cloth?

'Why did you steal my cloth?'

wɛ bácà kàmàdìì?

where 3p+PAS+be-at yesterday?

'Where were they yesterday?'

lìlù ɛlɛ n'ɛ̀ɛ̀yee?

yam how-many n'+2s+PRES+buy?

'How many yams are you buying?'

lìgulabi ɛlɛ nɛ̀ɛ̀yee?

money how-much n'+2s+PRES+spend?

'How much money are you spending?'

The interrogative determiner ≥̀mɛ́ni 'which' functions in much the same way as other determiners in that it must agree with the head noun of the Noun Phrase containing it. When the Noun Phrase containing ≥̀mɛ́ni is the object of the verb, the rules for emphasis apply.

bàklàma·bàmɛni bákù fua lɛnaa?

dogs which 3p+PAS+chew your meat?

'Which dogs ate your meat?'

ɔga ɔ̀mɛ́ni úkp̀li?

chief which 3s+PAS+die?

'Which chief died?'

fua ɔ̀ŋwani ɔ̀mɛ́ni ɔ̀lubò mɛ́ɛ́?

your borther which 3s+FUT+come here?

'Which brother of yours will come here?'

lìlù lɛ̀mɛ́ni nà fua uni ùùyee?

yam which that your mother 3s+PRES+buy?

'Which yams is your mother buying?'

kɛ̀tubi kàmɛ́ni nà bítìì?

waterpot which that 2p+PAS+take?

'Which water pot did you take?'

na is used also when ɔ̀mɛ́ni is part of a Noun Phrase which is part of a fronted adverbial.

uwi ɔ̀mɛ́ni nà bébò mɛ́ɛ́?

time which that 3p+PAS+come here?

'What time did they come here?'

Appendix A. Summary of the Noun Class System

Summary of the Noun Class System

(and Table of Concord and Agreement Forms)

A = Person or Noun Class and Number

B = Noun Class Prefix

C = Concordial Prefix

D = Independent Pronoun

E = Objective Pronoun

D = Possessive Pronoun

A		B	C	D	E	F
1	sg		LE, MO, N-	àmi	mi	mùnà
	pl		BO-	àbu	bù	bùlà
2	sg		A-	àwo	ɔ	fùlà
	pl		BE-	amì	mì	bìà
3	sg		O-	aŋu	ŋ	ŋwa
	pl		BA-	àma	mà	bala, mana

A		B	C	D	E	F
I	sg.	O, A-	O-	aŋu	ŋ	ŋwa
	pl.	BA-	BA-	àma	mà	bala, mana
II	sg.	O-	O-	aŋu	ŋ	ŋwa
	pl.	LE-	LE-	ànya	nyà	anya
III	sg.	LE-	LE-	àni	nì	anya
	pl.	BA-	BA-	àma	mà	bala, mana
IV	sg.	LE-	LE-	àni	nì	anya
	pl.	A-	A-	ànya	nyà	ana
V	sg.	KA-	KA-	àka	kà	kana
	pl.	BA-	BA-	àma	mà	bala, mana
VI	sg.	KA-	KA-	àka	kà	kana
	pl.	KO-	KO-	àku	kù	kuna

A		B	C	D	E	F
VII	sg.	KO-	KO-	àku	kù	kuna
	pl.	BA-	BA-	àma	mà	bala, mana
VIII	sg.	KO-	KO-	àku	kù	kuna
	pl.	A-	A-	ànya	nyà	ana
IX	sg.	KA-	KA-	àka	kà	kana
	pl.	N-	BO-	àmu	mù	anya
X	sg.	0-	O-	aŋu	ŋ	ŋwa
	pl.	BA-	BA-	àma	mà	bala, mana
XI		N-	BO-	àmu	mù	anya
XII		A-	A-	ànya	nyà	ana
XIII		O-	O-	aŋu	ŋ	ŋwa

A		B	C	D	E	F
XIV		LE-	LE-	àni	nì	aŋya
XV		KA-	KA-	àka	kà	kana
XVI		KO-	KO-	àku	kù	kuna
XVII	sg.	0-	O-	àŋu	ŋ	ŋwa
	pl.	0-	BA-	àma	mà	bala, mana
XVIII		BO-	BO-	àmu	mù	anya

Appendix B. Connected Texts

The Origins of Baglo

narrated by Samuel Ayitevi

bùlà bàlɛmì ni, kɛ̀sia bɔ́sì ni, bɔ́sì àsànti kama kɛ̀siàdì. bula lɛdi ńvɔ̀ ni, lɛ̀ca nvɔ̀ k'ɔ́mwì, nsu bɔsɔ lɛ́sɔ̀ lììse anì ka nà àbu bɔtɛ̀mì mɛ́. ká bɔ̀ta nvɔ̀ ni, aŋu bubàlɛ̀ ŋɔ̀tsìɛ; ndi bánì ŋɔ̀tsìɛ bɔ́sì. bɔ̀sì bɔ́sì bubàlɛlɛ̀ ńvɔ̀. aŋu ká búbù bɔ́lɛ̀ ni, mana ɔga ɔ́ni baalɔ̀ àgɔ̀kɔli ni, muna kudɔ búbò búbàlɛlɛ̀. aŋu ká búbò búbàlɛlɛ̀ ni, ùdù ɔ́ní nà útì ɔ́dà bù ni, ɔ̀ɔ̀dia bù. ɔ́nì bɔ́tù kɔwɔdù bɔ̀ka bɔmànà ɔma, nà kùtàkɔ lãã kútàdà àtibrùku. aŋu ká bɔ̀ɔŋwù lɛ̀tì ni, ùutì àbùàlaku ku lɛ̀prɛ̀ntùa kɔkɛ taaca. sí àanyà ni, nyáà ɔ̀ɔŋwà ɔ̀gbà alɔ. àmɔ ká bɔ̀ɔŋwù lɛ̀tì lɛ̀mɛni, aŋu nà bùùbɔ ntu tɛɛwi kɔ̀wɔdù kúŋwí. bùùbɔ ntu tɛɛwi. bùùbo tɛɛwi. ɔ̀ɔ̀ji. aŋu ká kɔwɔdù kɔ́mɛ̀ kɔ́lɛ̀ kúbɔ̀, lɛ̀ni: vlaà ni, aŋu bɔ́tà gbiaà; aŋu bula fuì bɔ́tɔ̀lɔ̀. aŋu ká bɔ́tɔ̀lɔ̀ ni, kɔ̀bì kɔ́dì kɔ̀ca kama mɛ́, lɛ̀ni, nà baalɔ̀ kù 'jináyà'. aŋu bula fuì bùbèlìɛ ńvɔ̀, àbu balɛmi fuiì. ka bùbéliɛ nvɔ̀ ni, aŋu bɔɔnù kàdà mɛ́ ni, ɔ̀nantu ɔɔna, kàdwɛ́ɛ̀. aŋu bètsuli bésè kalɔ ku bɔ̀ta. abu bagòlǫ̀ni, àbu ɲákpɛ̀ kama. aŋu ká bɔ̀ta ni, bààklàdi béeliɛ̀ kàda nvɔ̀, báàwɔ̀lɔ̀ fuiì. aŋu ɲáyà ɲa àbu búlìɛ̀ lɛgɔ̀lɔ̀ mɛ́.

Translation

We Balemi, the place we come from, we come from a certain place behind the Asanti. As for our language, it is still there, but it hasn't continued to remain like what we speak here. When we migrated from there, we arrived at ŋɔtsiɛ; (however) it's not from there, ŋɔtsiɛ, that we originate. Only in passing did we lodge there. Then, when we got there, their chief there was called Agɔkɔli, our section came and stayed there. While we were staying, that manner which he was using in governing us wasn't good for us. He told us to build a wall to go around the town (high enough) to reach God. When we were treading the dirt, he would put pieces of iron and of bottles into it. If you were trodding, then it would cut the sole of (your) foot. As we were kneading this soil, then we would throw water, pouring (it) on one wall. We were throwing water (and) pouring it. We were throwing and pouring.

He didn't know. When this wall fell down, like this: vlaà, then we got up 'gbiaà; then we all fled. When we fled, there was a certain hill behind here /pointing/ and it's called 'Dzinaya.' Then we all settled there, all us Balemi. When we settled there, as we were looking down here, it was raining, quite nicely. Then people started migrating. We the Baglos, we stayed behind. When we migrated, the rest had settled down there, they had all finished. That's why we settled in Baglo here.

Notes

Höftmann and Ayitevi (1968:216-247) present a very interesting account of some of the oral traditions of the Togɔ Remnant peoples, especially of the ŋɔtsiɛ legend, which is common, it seems, to most of the peoples of the southern part of Volta Region and Togo; they also include a number of original texts, including one on the ŋɔtsiɛ legend in Lɛlɛmi. (For identification, my informant, Samuel Ayitevi, is the grand-father of the co-author of the article, John K. Ayitevi.)

1. *bùlà* the possessive pronoun used as a sort of appositive. *ni* a sort of "verbal comma" used to highlight the preceding phrase, often best translated by 'as for'. 2. *kɛ̀siàdì*.(= kɛ̀sia 'place' + kádì 'a certain') in many cases, e.g., bɛ̀cwɛdi 'certain people', the concord prefix to *ɔ́*.dì 'a certain' is omitted. *bɔsɔ lɛ́sɔ̀* the infinitive is used together with the verb to emphasize the action. 3. *lɛ́sɔ̀ lììse* note that while lɛ́sɔ̀ 'it continued' is in the affirmative, lììse 'it didn't remain' is in the negative. *àbu* the independent pronoun is here used for emphasis. 4. *aŋu* an adverb which seems to indicate simultaneity of action, translated either by 'then' or left untranslated; in conjunction with ká (i.e., aŋu ká), translated by 'when' or 'while'. *ndi* emphasises the elements negated. *bɔ̀sì bɔ́sì* see note to bɔsɔ lɛ́sɔ̀ in line 2; literally, 'coming, we came (from)'. 5. *bubàlɛlɛ̀* note the use of the Come-itive marker -BA- . 7. *útì ɔ́dà* refers to Agɔkɔli. 8. *bɔ̀ka bɔmànà* bɔ̀ka means 'to be first', bɔmànà means 'to squeeze', together they mean 'to surround'. 9. *bɔ̀ɔnwù* , *ùutì* both in the present pro-

gressive (like many of the verbs following) to show habitual action as sort of a "historical present". 10 *taaca* 'placing, putting' form of present progressive used by second and subsequent verbs in a serial construction. 11. *alɔ* (= kalɔ 'bottom', 'ground') apparently, because ɔ̀gbà kalɔ 'the sole of the foot' has become almost a fixed phrase, the consonant of the ka- prefix has been lost. 13. *kɔ́lɛ̀ kúbɔ̀* see bɔ̀ka bɔmànà in line 8. Separately bɔ̀lɛ̀ means 'to rest, to sleep', bùbɔ̀ means 'to come, but together they mean 'to fall down'. *lɛ̀ni* a deictic which introduces a quotation or, as in line 15, is used when somebody is pointing. *vlaà*, *gbiaà* (l. 14) onomatopoeic words. 17 *kàdà* refers to the western part of the Buɛm district. 18. *bésè kalɔ* (= bésè 'they went' + kalɔ 'bottom', 'ground') 'they began'. 19. *nákpɛ̀* relative verb form in the Past tense, used to emphasise the subject. *béeliɛ̀ ... báàwɔ̀lɔ̀* (l. 20) note use of Past Progressive in serial construction. 20. *náyà* see nákpɛ̀ in line 19.

Why There are Chiefs

narrated by Samuel Ayitevi

ŋ́kà búlìɛ̀ kùkù ni, bùùbo 'ɔga. aŋu ùcwɛdì bùlà akɔ ùbààwɔ ubi. ubi ɔmɛ́ ɔ́tà ɔ́bì ɛ̀lɔ́, ńsù ùlèseì. ùùwi kàlɔ́. aŋu limeì lɛ́dì ni, uni kù ɔti bátrɔ́ bésè kemo. aŋu ùlòku unɔŋ̀gù ɔ́dì úlìè ni, aŋu únù ka lɛlɛdi lɛ̀blà "kpá." ɛte únù "ƒiƒiƒiƒiƒiƒi." ɛte ubi ɔmɛ́ ɔ́tà únyè. útéfwìè àyìkpɛ̀ ɔ̀mɛ́ na útì úbɔ̀ ùbɛ́fì n'ɔ́blà kutu. ɔ́dì. "ubi ɔ̀mɛ́ ùùse ǹsàa!" aŋu ùtásù kúélà. aŋu ka uni mɛ̀nɛ̀ bébɔ̀ ni, aŋu na ɔ́sɔ̀ ɔ́sù ma ɔ́nì, lɛ̀ni, mana ubi ɔ̀mɛ́ ùùse. aŋu bánì ùlesè; aŋu ɔ́nì ùùse, niì si ɔ́kɔ̀ n'ɔ̀ɔ̀nyi ni, si bákàda ũ nà bátrɔ̀ bésè kemo ni nà bàvi ɛni nà bèbèlìɛ ŋ kudɔ nà si uwi ɔ́nvɔ̀ údù nà bàànu. aŋu ka bákàda ũ nà bátrɔ̀ bésè ùlòku ɔ́mɛ́ kudɔ ni, aŋu bénù "kpa" "ƒiƒiƒi." ka bátà bàànu ni, ɛ̀te úsè asɔ. aŋu na ɔti kù uni kù ùlòku ɔ́nvɔ̀ akɛ bésè bátálɛ̀, aŋu bálɛ̀mì. aŋu ɔti údù ɔtɔ aŋu na ɔ́tù ŋ kasa nà úfì ũ ɔ́dà ɸómóòmò. ɔ́nì, "bi ɔsu n'ààbla mi lɛni?" ǹsàa eseè." aŋu ɔ́nì, "ì́ì́." àmɔ́ ɔ́nì, "si àtasù ni, lɛ̀lɛnȧ ɔsu èlèse ni, nyáà nà bɔ̀nyɔnu ɔ." aŋu ɔ́nì, "nsu ɔɔ?" ɔ́nì "ì́ì́." "ɔga ndi. si bɛ̀ca mi ɔtɔ èmeì matɛ̀ nà bidiɛ mi nà ami ndi ɔga nà ɔma ɔ́mɛ̀nì kemo nà bìàtasumu mi ni, níì mésè." aŋu ɔ́nì, "esee?" ɔ́nì,""ĩ́ĩ́." aŋu ɔ́nì, "lɛlɛdi biara mètɔ." aŋu n'ɔ́lɔ̀ béneŋ̀kù nà útì ɔ́sù mà, àmù bánì, "ɔ́ɔ̀" níì bààbla. aŋu sɔɛɔ bétì ũ bácà ɔtɔ èmeì matɛ. limeì matɛdi ni, bétì ũ bésɔ̀ŋkù nà bácà katɔ nà bátɔ̀ nà báblà bétè ũ kalɛna utsuli ɔɔdi lɛga. aŋu na ńvɔ́ nà bɔ̀lɔɔ̀nu bɔ́tì ka ɔga ɔca sɔsɔ.

Translation

Anyhow, we settled down in the olden days, (but) we didn't have any chief. Then somebody among us came to give birth to a child. The child grew up, but he wouldn't walk. He remained on the ground. Then, on a certain day, his mother and father went to farm. Then there was a certain old woman sitting there and she heard something go "Pop!" Immediately after, she heard, "Fififififi.." Right after, the child stood up. He went and caught a mouse and he took it, roasted it, and made stew out of it. He ate it. "So the kid walks!" Then she didn't say anything. Then when the mother and father came back, the old woman told them that that child of theirs was walking. They said he didn't walk; then she said he did walk, in fact if she were telling lies, then if they'd take leave of her and go off to farm, stay there a while, and return to her place, when the time came they'd see. Then they took leave of her and went to the woman's place and heard "Pop""Fifififi." When they got up to look, then he was really walking. Then the father and mother and old woman went there and went in. The father entered the house and seized the child, holding him tightly. He said, "Why do you act this way with me? You really do walk." He answered, "Yes." The former said, "If you don't say why you don't walk, then we'll stay with you." Then the child said, "Should I tell you?" The father said, "Yes." "I'm a chief. If you put me in a room for seven days and take me out and I'm a chief in this town and you go to serve me, then I'll walk." The father asked, "You'll walk?" The child replied, "Yes." The father said, "I'll do everything." Then he summoned the elders and revealed (the matter) to them; they said, "OK"; in fact, they'd do it. Then, in fact, they took (the child) and put him in a room for seven days. On the seventh day, they sent him out and drummed and danced, and they did everything for him as (they would) for somebody becoming a chief. It's from that that we should see to know why there really are chiefs.

Notes

2. ùbààwɔ 3s+COME+bear. ɔ́ɓì ɛ̀lɔ̀ (= ɔ́bì lɛ̀lɔ̀) 11. bèbèlìɛ ŋ kuɗɔ ŋ is presumably a reduced form of ŋwa 'her'. 12. bàànu 3p+CERT+see. 14. asɔ (= sɔsɔ) 'truly'. 20. bɛ̀ca ... bidiɛ both verbs are in the Subjunctive. 22. bààtasumu presumably 2p+CERT+GO+serve.

kɔtɔ̀ǹjà

narrated by Dominic Nyarkɔ

àbu bagòlò ni, si ɔtɔdì kemo banu kà mana bètsuli bàsɔ bèèmɔ̀mo na bàlàyɔ kà mana bèbì bètelìɛ̀ kɔ̀jà ɔma ɔ̀màmadì ni, bàkana na bèti, ani, fu' ɔ̀ŋwani ùbidi bɛte f' ubidì n'ùti kana ɔtɔ kemo kàlàyi mì. si f'ɔ̀ŋwani ùnuìŋgùdì ìye f'ɔ̀ŋwani ùbliìdì ɔ̀nànà úkpì ni, si ààyɔ, àkana n'èti ulòkudi. ŋwa àlɔ̀ ǹdi: kùkù ni, bèlòku nátááàslà ku bànànà kemu. àma kù ma nábl̀a àjuma. aŋu ɔsù, bɔ̀ɔnù ka si ɔ̀nànà úkpì ni na ùlòku ɔ́sɔ̀ úlìɛ̀ kàduli ńvɔ̀ ni, nya ɔ̀dla. ŋwa àlɔ̀ ǹdi bebi bánvɔ̀ bátábì tɔ ɛlɔ. si útì mà úsɛ̀ŋgu kɛsi màmà ni, bàluubo àbi na f' ɔ̀ŋwani ŋwa ɔtɔ kemo kayì. aŋu ɔsù nɔ́híà ka si ùcuɛdi ɔ̀yɔɔ̀, ɔ̀kana ùti ɔ̀ŋwani ùlòkudi. ŋwa àlɔ ǹdi ɔ̀ŋwani úùkpì; aŋu ɔ́sɔ̀ ùùbɔ.

Translation

Marriage within the Family

We the Baglɔs, if in a certain house they see that their people continue not to be many and they don't want their children to set up a household in any other town, they can take, say, a child of your brother's and give him/her to a child of your own to marry so that the lineage won't be lost to you. If either your older brother or your younger brother dies, if you want to, you can marry his wife. The grounds are that in the olden days, women used to follow the men to farm. They'd both do the work. Therefore, we see that if a man died and his wife continued to remain at that compound, it would be good. The reason is that the children hadn't yet grown up. If the mother took them and sent them somewhere else, they would suffer and your brother's own household would lose out. For this reason it's important that if somebody wants to, he can marry his brother's wife. The reason is that the brother has died; he's not there any more.

Notes

1. *ni* the "verbal comma". *ɔtɔdì* (= ɔtɔ 'house' and ɔdī 'a certain') 2. *bàsɔ bèèmòmo* even though bèèmòmo 'they are not many' is negated, bàsɔ 'they continue' is not; this is one of the few cases in which

all the verbs in a serial verb construction do not co-vary with respect to negation. *kɔ̀jà* abstract noun formed from ɔ̀jà, bà- 'husband'; cf. kɔtɔ̀njà 'marriage within the family', which is an abstract compound noun formed from ɔtɔ, lɛ- 'house, home' and ɔ̀jà, bà- 'husband'.

3. *bàkana na bèti* 'they can take'; I cannot account for the reason that na is inserted between bàkana 'they can' and bèti 'they should take'. *ani* possibly the same as the preposition àni 'as if'. *fu' ɔ̀ŋwani* an elided form of fùlà ɔ̀ŋwani 'your sibling'. *ùbidi* (= ubi 'child' and ɔdi 'a certain') the determiner ɔdi occurs quite frequently with nouns in the kinship system, possibly to indicate inalienable possession; compare ɔ̀lɔ̀ku 'a woman' with ɔ̀lɔ̀kudi 'a wife' and, possibly, ɔ̀ŋwa 'a sibling' with ɔ̀ŋwani '(somebody's) sibling'.

4. *kana* 'so that', introducing a purpose clause, probably an elided form of kàlɛ̀ na 'a way which'. *ɔtɔ kemo* 'household', literally, 'house's inside'. *kàlàyi* agrees with kemo 'inside'. 7. *nátáàsìà ku* 'used to follow'; the Relative Past is used to express a historical fact. *àma kù ma* 'they both'; àma 'they' presumably refers to

bèlòku 'women' and ma 'they' presumably refers to bàṇànà 'men'. ma 'they' is the object form of the pronoun and, in formal speech, would not usually follow a conjunction. _náblà_ also in the Relative Past to express a historical fact. 10. _f' ɔ̀ŋwani ŋwa ɔtɔ kemo_ literally, 'your brother's his house inside'; the possessive pronoun ŋwa 'his' is used to give emphasis, analogous to the English "own" as in "your brother's own household." 11. _ɔ̀yɔɔ̀_ the falling tone and lengthening of the final syllable indicates the end of the clause.

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